Konieczny, Katherine

To:

Batra, Rakesh; Jereza, Catherine; Rosenbaum, Matthew; Mills, Brian

Cc: Subject: <u>Drake, Christopher; Mumme, Bettina</u> Questions for PJM and Dominion

Date:

Monday, October 16, 2017 1:51:20 PM

Attachments:

Questions for PJM and Dominion 2017-10-16.docx

Importance:

High

Following the Friday meeting, we tried to capture the technical questions that were raised in a short list for PJM and Dominion. That list is attached. Rakesh, because you sent the last round of questions to PJM and Dominion, it would be consistent if this next list also came from you. (b) (5)

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Because we are (b) (5)

asking for PJM and Dominion's answers by

COB Wednesday, please send this document out as quickly as you can--this afternoon if possible.

Thank you, Kathy

Katherine (Kathy) Konieczny Acting Assistant General Counsel for Electricity and Fossil Energy Forrestal 6D-033 (202) 586-0503 Katherine.Konieczny@hq.doe.gov

PJM and Dominion:

DOE seeks more information to better understand alternatives to Yorktown Unit 1 & 2 operation. Please provide an initial response to the following questions in writing no later than Wednesday, October 18. Additional information, if any, should be submitted by Monday, October 23.

Demand Response

- What is the maximum power (in kW or MW) that Dominion can save, under ideal conditions, through its demand response program?
- What is the estimated minimum cost (or cost range) of reaching the maximum demand response? Who would pay that cost?

Distributed Generation Resources

- What is the maximum power (in kW or MW) that Dominion can save, under ideal conditions, through distributed generation resources (e.g., rooftop solar)?
- What is the estimated minimum cost (or cost range) of reaching the maximum distributed generation? Who would pay that cost?

Battery Storage Resources

- What is the maximum power (in kW or MW) that Dominion can save, under ideal conditions, through its existing battery storage resources?
- How long does it take to procure battery storage, and what is the minimum price per MW?

Other Alternatives

- How much alternative power would Dominion need to mobilize to preserve reliability during a transmission outage and without running either Yorktown coal unit?
- How much would that mobilization cost? Who would pay that cost?

Drake, Christopher

To:

Konieczny, Katherine

Cc:

Batra, Rakesh

Subject: Date: RE: Questions for PJM and Dominion Monday, October 16, 2017 3:52:24 PM

Attachments:

Questions for PJM and Dominion 2017-10-16v2.docx

Kathy,

(b)(5)

I revised the question

document accordingly, as attached. Rakesh, if you have further thoughts on it, please let us know.

Thanks, Chris

----Original Message----

From: Batra, Rakesh

Sent: Monday, October 16, 2017 3:00 PM

To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Jereza, Catherine

<Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian

<Brian.Mills@hq.doe.gov>

Cc: Drake, Christopher < Christopher. Drake@hq.doe.gov>; Mumme, Bettina < Bettina. Mumme@hq.doe.gov>

Subject: RE: Questions for PJM and Dominion

Kathy:

(b) (5)

PJM submitted an answer to the comments filed by

Sierra Club on September 6, 2017, in the above referenced proceeding ("Comments") in response to PJM's Order No. 201-17-2 ("Order") renewal application ("Renewal Application"). The next 2 paragraphs are direct quotes from the filing.

Currently, approximately 14 MW of PJM Demand Response is available in the in the North Hampton Roads area on the Virginia Peninsula. Since usage is limited, PJM will only implement DR as needed post-contingency to restore customer load.

Currently, Dominion Energy Virginia has about 20 MW of Demand Side Management capabilities in the peninsula in the form of remote air-conditioning control as well as the ability to curtail a large industrial customer up to 75 MWs for transmission emergencies. This air conditioning control is limited to a total of 120 hours and for 30 days during the summer months. Dominion Energy Virginia will reserve this capability for the highest need days to reduce load in the North Hampton Roads area on the Virginia Peninsula.

Moreover, Appendix II of the Application details the availability of other generation in the North Hampton Roads areas of the Virginia Peninsula and again specifies the availability of demand response and other information noted above and concludes: "Thus while PJM and Dominion Energy Virginia have a very limited amount of demand response available of the peninsula, it is not sufficient to ensure reliable service.

Please let me know if you feel otherwise.

Thanks, Rakesh

----Original Message----

From: Konieczny, Katherine

Sent: Monday, October 16, 2017 1:51 PM

To: Batra, Rakesh < Rakesh. Batra@Hq.Doe.Gov>; Jereza, Catherine < Catherine.Jereza@Hq.Doe.Gov>;

Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov> Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov> Subject: Questions for PJM and Dominion Importance: High

Following the Friday meeting, we tried to capture the technical questions that were raised in a short list for PJM and Dominion. That list is attached. Rakesh, because you sent the last round of questions to PJM and Dominion, it would be consistent if this next list also came from you. (b) (5)

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Because we are (b) (5) asking for PJM and Dominion's answers by COB Wednesday, please send this document out as quickly as you can--this afternoon if possible.

Thank you, Kathy

Katherine (Kathy) Konieczny Acting Assistant General Counsel for Electricity and Fossil Energy Forrestal 6D-033 (202) 586-0503 Katherine.Konieczny@hq.doe.gov

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- According to Appendix II of PJM's June 2017 Application, "PJM has approximately 14 MW of PJM Demand Response available on the peninsula and Dominion Energy Virginia has about 20 MW of Demand Side Management capability on the peninsula in the form of remote air conditioning control as well as the ability to curtail a large industrial customer an average of 75 MWs for transmission emergencies (but the air conditioning control is limited to a total of 120 hours and for 30 days during the summer months). Are those numbers still accurate? If not, what are the correct numbers?
- According to PJM's RTEP Input Assumptions and Scope Whitepaper, Dominion could have a
 maximum of 130 MW of distributed solar generation available during the summer. Is that
 number still accurate? If not, what is the correct number?
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- According to the Summary of Findings issued alongside DOE Order No. 202-17-4, the Yorktown coal units offset 950 MW of load that could be shed in a transmission outage. Is that number still accurate? If not, what is the correct number?

From: Konieczny, Katherine
To: Drake, Christopher
Cc: Batra, Rakesh

Subject: RE: Questions for PJM and Dominion Date: Monday, October 16, 2017 3:55:12 PM

I'm fine with that approach. My only comment is that there appears to be a missing quotation mark in the first bullet.

----Original Message-----From: Drake, Christopher

Sent: Monday, October 16, 2017 3:52 PM

To: Konieczny, Katherine < Katherine.Konieczny@Hq.Doe.Gov>

Cc: Batra, Rakesh < Rakesh Batra@Hq.Doe.Gov> Subject: RE: Questions for PJM and Dominion

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(b) (5)

I revised the question

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Sent: Monday, October 16, 2017 3:00 PM

To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Jereza, Catherine

<Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian

<Brian, Mills@hq.doe,gov>

Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Munnne, Bettina <Bettina.Mumme@hq.doe.gov> Subject: RE: Questions for PJM and Dominion

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(b) (5) PJM submitted an answer to the comments filed by Sierra Chib on September 6, 2017, in the above referenced proceeding ("Comments") in response to PJM's Order No. 201-17-2 ("Order") renewal application ("Renewal Application"). The next 2 paragraphs are direct quotes from the filing.

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Please let me know if you feel otherwise.

Thanks, Rakesh

----Original Message-----From: Konieczny, Katherine

Sent: Monday, October 16, 2017 1:51 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov>

Cc: Drake, Christopher < Christopher. Drake@hq.doe.gov>; Mumme, Bettina < Bettina. Mumme@hq.doe.gov>

Subject: Questions for PJM and Dominion

Importance: High

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Katherine (Kathy) Konieczny Acting Assistant General Counsel for Electricity and Fossil Energy Forrestal 6D-033 (202) 586-0503 Katherine.Konieczny@hq.doe.gov

Drake, Christopher

To:

Batra, Rakesh

Cc:

Konieczny, Katherine

Subject:

RE: Questions for PJM and Dominion Monday, October 16, 2017 4:07:22 PM

Date: Attachments:

Questions for PJM and Dominion 2017-10-16v3.docx

Rakesh,

Per our conversations, we would appreciate it if you could send the revised version of the questions (attached) to PJM and Dominion first thing tomorrow morning (Tuesday 10/17).

Thanks,

Chris

Chris Drake
Attorney-Adviser
U.S. Department of Energy, Office of General Counsel
Office of Electricity & Fossil Energy (GC-76)
Forrestal North, Room 6B-256
Tel. 202.586.2919
Christopher.Drake@hq.doe.gov

This communication may contain privileged or confidential material. Potential privileges include, but are not limited to, Attorney-Client, Attorney Work-Product, and Deliberative Process.

PJM and Dominion:

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Konieczny, Katherine

To:

Batra, Rakesh; Drake, Christopher

Cc:

Rosenbaum, Matthew

Subject: Date: RE: Questions for PJM and Dominion Tuesday, October 17, 2017 9:19:09 AM

We'll swing by as soon as Chris gets in.

----Original Message----

From: Batra, Rakesh

Sent: Tuesday, October 17, 2017 7:24 AM

To: Drake, Christopher < Christopher. Drake@hq.doe.gov>; Konieczny, Katherine

<Katherine.Konieczny@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew < Matthew. Rosenbaum@hq.doe.gov>

Subject: RE: Questions for PJM and Dominion

Chris & Kathy:

I discussed this with Matt and would like to talk to either of you. Could you please stop by any time this morning?

Thanks,

Rakesh

----Original Message----

From: Drake, Christopher

Sent: Monday, October 16, 2017 3:52 PM

To: Konieczny, Katherine < Katherine. Konieczny@Hq. Doe. Gov>

Cc: Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov>Subject: RE: Questions for PJM and Dominion

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(b) (5)

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Sent: Monday, October 16, 2017 3:00 PM

To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Jereza, Catherine

<Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian

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Cc: Drake, Christopher < Christopher. Drake@hq.doe.gov>; Mumme, Bettina < Bettina. Mumme@hq.doe.gov>

Subject: RE: Questions for PJM and Dominion

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Thanks, Rakesh

----Original Message-----From: Konieczny, Katherine

Sent: Monday, October 16, 2017 1:51 PM

To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian <Brian.Mills@hq.doe.gov> Cc: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>

Subject: Questions for PJM and Dominion

Importance: High

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Katherine (Kathy) Konieczny
Acting Assistant General Counsel for Electricity and Fossil Energy
Forrestal 6D-033
(202) 586-0503
Katherine, Konieczny@hq.doe.gov

Drake, Christopher

To:

Jereza, Catherine; Konieczny, Katherine; Mumme, Bettina; Batra, Rakesh; Rosenbaum, Matthew

Subject:

Short discussion on factual material for 202(c) rehearing order

Attachments:

DRAFT Summary of Findings Order No. 202-18-1 2017-10-19-BM10-20-17 clean.docx

All,

Attached is the latest working version of the draft Summary of Findings to accompany the Order on Rehearing. GC-51 has a few edits that we will incorporate when the time comes.

Konieczny, Katherine

To:

Drake, Christopher; Jereza, Catherine; Mumme, Bettina; Batra, Rakesh; Rosenbaum, Matthew; Mills, Brian

Subject:

RE: Short discussion on factual material for 202(c) rehearing order

Date:

Friday, October 20, 2017 1:55:10 PM

Attachments:

<u>DRAFT Order 202-18-1 2017-10-19 500p.docx</u> <u>DRAFT Summary of Findings Order No. 202-18-1 2017-10-20 130pm.docx</u>

Please use the attached documents instead. I apologize that you received a version with unnecessary comment bubbles and tracked changes.

-----Original Appointment-----

From: Drake, Christopher

Sent: Thursday, October 19, 2017 5:26 PM

To: Drake, Christopher; Jereza, Catherine; Konieczny, Katherine; Mumme, Bettina; Batra,

Rakesh; Rosenbaum, Matthew

Subject: Short discussion on factual material for 202(c) rehearing order

When: Friday, October 20, 2017 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).

Where: TPTA

<< File: DRAFT Summary of Findings Order No. 202-18-1 2017-10-19-BM10-20-17 clean.docx

>>

All,

Attached is the latest working version of the draft Summary of Findings to accompany the Order on Rehearing. GC-51 has a few edits that we will incorporate when the time comes.

Mikolop, Todd S.

To:

"The Secretary@hq.doe.gov; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine

Cc:

Finto, Kevin; Michael Regulinski; Pincus, Steven; "sanjay.narayan@sierraclub.org"

Subject:

DOE Order No. 202-17-4: Virginia Electric and Power Company and PJM Interconnection LLC Motion for Leave to

Answer and Answer to Sierra Club"s Petition for Rehearing

Date:

Friday, October 20, 2017 2:14:29 PM

Attachments:

image001.jpg

Virginia Elec. Power FPA 202(c) Motion for Leave to Answer Sierra Club 2nd Rehearing Request 67018691 4.PDF

Dear Secretary Perry,

On behalf of Kevin Finto, counsel for the Virginia Electric and Power Company (Dominion Energy Virginia), and PJM Interconnection LLC, please find the attached Motion for Leave to Answer and Answer to the Sierra Club's Petition for Rehearing of the DOE's Order No. 202-17-4.

Please contact Mr. Finto or me if you have any questions or require further information regarding this proceeding.

Respectfully submitted,

Todd S. Mikolop



Todd Mikolop

Senior Attorney tmikolop@hunton.com p 202.778.2249 m(b) (6) bio | vCard | blog

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037

hunton.com

UNITED STATES OF AMERICA BEFORE THE DEPARTMENT OF ENERGY

Virginia Electric and Power Company)	Order No. 202-17-4
(Dominion Energy Virginia))	

MOTION FOR LEAVE TO ANSWER AND ANSWER OF VIRGINIA ELECTRIC AND POWER COMPANY AND PJM INTERCONNECTION LLC

Pursuant to Rules 212 and 713 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission" and "Commission Rules"), 18 C.F.R. §§ 385.212, 385.713(c)(3)¹, the Virginia Electric and Power Company ("Dominion Energy Virginia") and PJM Interconnection LLC ("PJM") respectfully submits to the Secretary for the Department of Energy ("Secretary" and "Department") this Motion for Leave to Answer ("Motion") and Answer ("Answer") to the Sierra Club's Petition for Rehearing ("Petition") of the Secretary's Order No. 202-17-4 (the "Renewal Order") submitted on October 5, 2017.

I. Point of Order

As an initial point of order, while the Renewal Order does not explicitly identify the parties to this proceeding, Dominion Energy Virginia seeks to clarify that it is a party of right.

Commission Rule 102, 18 C.F.R. §385.102(c)(1) states that a "party" means "any respondent to a proceeding" and subsection (f)(1) states that a respondent means any person "to whom an order

The Department has previously indicated that its regulations pertaining to Federal Power Act § 202(c) emergency authority at 10 C.F.R. § 205.370 et seq. do not contain a rehearing section, but that parties should look to guidance on rehearing procedures from the Commission Rules. E-mail from Lot Cooke, Dep't of Energy Office of Gen. Counsel, to Linda Alle-Murphy, Assoc., Schnader Harrison Segal & Lewis L.L.P. (December 28, 2005 9:05 AM) available at: https://energy.gov/oe/downloads/question-and-answer-procedural-questions-application-rehearing-order-no-202-05-02 ("The DOE regulations on emergency orders, 10 CFR section 205.370, et seq., do not a have specific rehearing section, but a party seeking rehearing can look for procedural guidance to FERC's Rules of Practice and Procedure, 18 CFR Part 385."). Therefore, to the extent possible, this Motion and Answer is stylized under the Commission Rules. However, in doing so, Dominion Energy Virginia does not necessarily concede that the Commission Rules govern this proceeding.

... is issued by the Commission." The Renewal Order issued by the Secretary is explicitly directed at Dominion Energy Virginia: Dominion Energy Virginia "shall" operate Units 1 and/or 2 of the Yorktown Power Station ("Yorktown") as directed by PJM; Dominion Energy Virginia "shall continue to comply with the dispatch methodology submitted by PJM; Dominion Energy Virginia "shall" report all dates on which Yorktown Units 1 and/or 2 are operated as well as the estimated emissions and water usage data associated with their operation. Because Dominion Energy Virginia is a person to whom the Renewal Order is issued, it is a respondent and, therefore, a party of right to this proceeding.

II. Motion for Leave to Answer

Dominion Energy Virginia and PJM respectfully move for leave to answer the Petition. While Commission Rules discourage answers to rehearing requests, a party may answer a rehearing request if permitted by the decisional authority (here the Secretary or his designee). For its part, the Commission has permitted a party to answer a request for rehearing when those answers help to clarify complex issues, provide additional information, or are otherwise helpful in the Commission's decision-making process. Likewise, the Department has permitted "submission" of any additional comments, information, or analysis on the operation of and/or effects of an order under FPA § 202(c) as such operation and/or effects may be relevant to a

² Renewal Order at 2.

³ Dominion Energy Virginia's position as a party of right to this proceeding is explicitly evident from the face of the Renewal Order. However, out of an abundance of caution, and to preserve our rights, should the Secretary deem Dominion Energy Virginia not to be a party to this proceeding, then, pursuant Commission Rule 214, 18 C.F.R. § 385.214, Dominion Energy Virginia respectfully moves to intervene in this proceeding. Dominion Energy Virginia's interest in this proceeding is clear by the number of actions ordered of it under the Renewal Order.

^{4 18} C.F.R. § 385.213.

⁵ See Black Oak Energy, L.L.C. v. PJM Interconnection, L.L.C., 125 FERC ¶ 61,042 at P 14 (2008) (accepting answer to rehearing request because the Commission determined that it has "assisted us in our decision-making process."); FPL Marcus Hook, L.P. v. PJM Interconnection, L.L.C., 123 FERC ¶ 61,289 at P 12 (2008) (accepting "PJM's and FPL's answers [to rehearing requests], because they have provided information that assisted us in our decision-making process.").

decision on the request for rehearing.⁶ As demonstrated below, all of these criteria are met by the Answer. Therefore, Dominion Energy Virginia and PJM respectfully request that the Secretary grant this Motion because the Answer will help clarify the record and contribute to an understanding of the operation and/or effects of the Renewal Order.

III. Answer

Sierra Club raises two issues in its Petition: (1) whether the Department satisfied the National Environmental Policy Act in issuing the Renewal Order by invoking a categorical exclusion; and (2) whether the Department, in issuing the Renewal Order demonstrated that it mandates environmental compliance to the maximum extent practicable or limits the hours of operation to the those necessary to meet the emergency or serve the public interest. For the reasons set forth below, the answer to both questions is yes. The Sierra Club's arguments are without merit.

A. The Department Properly Categorically Excluded the Renewal Order from Review under the National Environmental Policy Act.

Sierra Club asserts that the Department improperly applied a "categorical exclusion" in determining that the Renewal Order was not subject to further review pursuant to the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.* ("NEPA"). As it did in its first Petition submitted on July 13, 2017, Sierra Club first suggests that the Department did not comply with the statute and asks the Secretary to do more review than NEPA requires.

The Department fulfilled its NEPA obligations by analyzing the effects of the Renewal Order and determining that activities were categorically excluded from NEPA's requirement to prepare either an environmental assessment or an environmental impact statement. Further,

⁶ Response to Requests for Rehearing of DOE Dec. 20, 2005 DOE Order No. 202-05-3, Order No. 202-06-1, Docket No. EO-05-01, Feb. 17, 2006.

Sierra Club fails to recognize authority granted by Congress in the FPA regarding applicability and enforceability of environmental law while the Renewal Order is in effect. The Department appropriately determined that issuing the Renewal Order is an action that is categorically excluded from further NEPA analysis.

1. NEPA Allows for Categorical Exclusions

NEPA is a procedural statute that requires a federal agency to assess the environmental effects of a proposed action prior to making a decision on the action. An agency assesses a major federal action significantly affecting the human environment in a detailed statement known as an "environmental impact statement" ("EIS").⁷ If the agency determines from the outset that the action does not require preparation of an EIS, or determines that analysis is required to determine whether to prepare an EIS, the agency is authorized by regulation to prepare an "environmental assessment" ("EA").⁸ An agency may also determine that certain categories of actions do not individually or cumulatively have a significant effect on the human environment and, therefore, neither an EA nor an EIS is required. These categories of actions are known as "categorical exclusions."

Categorical exclusions are individually determined by federal agencies using agencyspecific procedures.¹⁰ The Department establishes categorical exclusions pursuant to a
rulemaking for defined classes of actions that the Department determines are supported by a
record showing that they normally will not have significant environmental impacts, individually
or cumulatively.¹¹ This record is based on the Department's experience, the experience of other

⁷ 42 U.S.C. § 4332(c).

⁸ 40 C.F.R. § 1501.4(a)-(c).

⁹ Id. at § 1508.4.

¹⁰ Id. at §1501.4(a)(2).

^{11 76} Fed Reg. 63,765 (Oct. 13, 2011).

agencies, completed environmental reviews, professional and expert opinion, and scientific analyses.¹² The Department also considers public comment received during the rulemaking.¹³

Categorical exclusions are not exemptions or waivers of NEPA review, "they are simply one type of NEPA review." Once established, categorical exclusions provide an efficient tool to complete the NEPA environmental review process for proposals that normally do not require more resource-intensive EAs or EISs. The use of categorical exclusions can reduce paperwork and delay, so that EAs or EISs are targeted toward proposed actions that truly have the potential to cause significant environmental effects. ¹⁶

2. The Renewal Order fits within the Power Management Categorical Exclusion

The Department's categorical exclusions include activities related to power marketing services applied in the Renewal Order. These activities include, but are not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities, provided that the operations of generating projects would remain within normal operating limits. 18

As part of its environmental review responsibilities under NEPA, a Department NEPA Compliance Officer was required to examine the proposed_Renewal Order to determine whether it qualified for a categorical exclusion. The Department's process is consistent with that described in the Council on Environmental Quality's ("CEQ") Categorical Exclusion Guidance: "When determining whether to use a categorical exclusion for a proposed activity, a Federal agency must carefully review the description of the proposed action to ensure that it fits within

¹² *Id*.

¹³ *Id*.

¹⁴ 75 Fed. Reg. 75,631.

¹⁵ Id.

¹⁶ Id.

¹⁷ 10 C.F.R. Pt. 1021, Subpt. D, App. B, B4.4.

¹⁸ Id.

the category of actions described in the categorical exclusion. Next, the agency must consider the specific circumstances associated with the proposed activity, to rule out any extraordinary circumstances that might give rise to significant environmental effects requiring further analysis and documentation" in an EA or EIS. ¹⁹ The Department's record of this process is known as a "Record of Categorical Exclusion Determination."

As described in the Record of Categorical Exclusion Determination accompanying the Renewal Order and included in the docket for the Renewal Order²⁰, the Department applied a single categorical exclusion that applies to power marketing services and activities. In the first Application for Order submitted on June 13, 2017 and incorporated by reference in the Renewal Application, PJM requested authorization to order Dominion Energy Virginia to operate the Yorktown Units 1 and 2 when total demand for electricity "exceeds certain levels to avoid impacting electric reliability and potential violations of Reliability Standards developed by the North American Electric Reliability Corporation ("NERC") in the North Hampton Roads area."²¹ This type of activity fits squarely within the power marketing services and activities exclusion, which includes load balancing "that helps ensure system reliability by managing energy resources to be equal with load."²² The Record of Categorical Exclusion also stated that "DOE has determined that the proposed action identified above will not have a significant effect on the human environment."²³

¹⁹ 75 Fed. Reg. at 75,631.

²⁰ Findings of Fact at 9.; Records Of Categorical Exclusion Determination Order No. 202-17-4 (Sept. 11, 2017)

²¹ Application at 2.

²² 76 Fed. Reg. 63,777 (Oct. 13, 2011).

²³ Records of Categorical Exclusion at 3.

3. Sierra Club's NEPA arguments are meritless.

Sierra Club argues that "the operations required by the Department's Order do not comply with the Clean Air Act standards and therefore are not within normal limits." The Department properly applied the power marketing and services categorical exclusion because the operations of Yorktown Units 1 and/or 2 will remain within normal operating limits. The term "normal operating limits" means the capacity of generating units. As stated in the Records of Categorical Exclusion, "[t]he expected combined operation of Yorktown Units 1 and 2 reacting to electricity reliability emergencies under DOE Order No. 202-17-4 will be well below normal operating capacities and limits of Yorktown Units 1 and 2."²⁶

As described in the Application and in the Renewal Order, Dominion Energy Virginia had been operating the subject units under authorization from the Environmental Protection Agency ("EPA") under an Administrative Compliance Order on Consent ("ACO") that includes further operational limitations restricting the capacity of the generating units. In the Summary of Findings accompanying its Renewal Order, the Department noted that it had consulted with the EPA and reviewed estimated emissions and water usage data, and that the Renewal Order "continues the operational limitations" in the EPA's ACO.²⁷ These limits, approved by a federal agency with jurisdiction, can only be considered "normal" or, truly, more restrictive than "normal" operating limits associated with generating capacity. Indeed, the on-going normalcy of these limits is confirmed every two weeks when Dominion Energy Virginia's reports to the

²⁴ Sierra Club Petition at 1.

²⁵ The Department should not be misled by the Sierra Club's suggestion in subheading IV.A. of the Petition that the Department "should assess the impacts of its action under the National Environmental Policy Act." The analysis that led to application of a categorical exclusion is, in itself, an assessment of the impacts under NEPA. That Sierra Club wishes the Department had done more than required by law is of no consequence to whether the Department fully complied with NEPA.

²⁶ Records of Categorical Exclusion at 3.

²⁷ Summary of Findings at 9.

Department all dates on which Yorktown Units 1 and/or 2 have operated <u>and</u> the associated air emissions and water usage for those dates.

Sierra Club's argument that the Renewal Order compels violations of EPA's Mercury and Air Toxics Standards under the Clean Air Act, which consequently cannot be considered "normal operations," is a red herring. Congress carefully crafted FPA § 202(c) to take into account potential violations of federal environmental laws that may result from the issuance of an emergency order. That compliance with such an order "results in noncompliance with, or causes such party to not comply with, any Federal, State, or local environmental law or regulation, such omission or action shall not be considered a violation of such environmental law or regulation, or subject such party to any requirement, civil or criminal liability, or a citizen suit under such environmental law or regulation." Thus, any emissions resulting from compliance with the Renewal Order that may not comply with regulations promulgated under the Clean Air Act are not violations, much less emissions that are not "normal." Because FPA § 202(c) provides this exemption, application of the powering marketing services and power management activities categorical exclusion to issue the Renewal Order would not result in violations of the Clean Air Act and was consequently appropriate.

B. Sierra Club Misconstrues FPA Requirements where an Order Conflicts with Environmental Regulations.

According to FPA § 202(c)(2), where, as in this proceeding, an order conflicts with a Federal environmental law, the Department "shall ensure that such order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent

²⁸ *Id.* at 14.

²⁹ FPA § 202 (c)(3).

with any applicable Federal, State, or local environmental law or regulation and minimizes any adverse environmental impacts." The Renewal Order itself describes in detail the manner in which the Department has fulfilled these requirements. Sierra Club, however, challenges the Department's consultation with the EPA regarding short-term emissions limitations and misconstrues the actual extent of Yorktown Units 1 and/or 2's operations in an effort to expand measures the Department may require to limit emissions.

1. The Department Properly Consulted with the EPA.

Sierra Club alleges that the Department's consultation with the EPA was deficient because Sierra Club thinks the record does not contain sufficient information.³⁰ FPA § 202 (c)(4)(B) requires consultation with the primary Federal agency with expertise in the environmental interest (here, the EPA) but does not proscribe how the agencies should consult or what records should be included in the public docket beyond any conditions the EPA determines are necessary to minimize adverse impacts to the extent practicable. As noted in the Summary of Findings, after consulting with EPA, and consistent with that consultation, the Department found that the only appropriate short-term emissions limitation on Yorktown Units 1 and 2 would be to curtail operating hours to the maximum extent practicable for reliability purposes. By consulting with the EPA, the Department met its statutory obligation. Even if, in its discretion, the Department considered doing more, the fact is that the limited use – on an emergency basis – of Yorktown Units 1 and/or 2 would be reason enough to not consult any more than the Department did. Sierra Club's desire that the Department had done more is simply not supported by law or the instant facts.

³⁰ Petition at 9.

2. The Limitations on Operations Are Appropriate.

Sierra Club misconstrues the extent to which Yorktown Units 1 and/or 2 will operate pursuant to the Renewal Order. While conceding that curtailing operating hours is the only practicable means of limiting emissions, Sierra Club implies that the Units will be operating full-time for 18-20 months. This is simply not the case. The Renewal Order, in fact, only authorizes operation of Yorktown Units 1 and/or 2 "in the event generation ... is needed to maintain grid reliability." History and future projections show that the need is far less than full time and, in total, may only amount to 81 days over the entire 18-20 month period. Therefore, given the relatively low use of the Units, there is simply no need for the Department to require Dominion Virginia Energy to limit operations any more than the Renewal Order already does.

Finally, Sierra Club suggests that demand side management or distributive generation would reduce the number of hours of operation of Yorktown 1 and 2. The Renewal Order specifically requires PJM and Dominion to exhaust all reasonably available resources including demand side management and behind the meter generation sources prior to operating Yorktown Unit 1 or Yorktown Unit 2.³² Sierra Club provides comments by Ariel Horowitz suggesting that alternatives for distributive generation or demand side management might be available to solve the problem. Horowitz, however, admits that he does not know the load levels or deficiencies that need to be addressed. ³³ Moreover, far more robust solutions were carefully considered in the Corps permit process and failed to prove practicable. Such a demonstration for demand side management or distributive generation is made more difficult by the fact that Skiffes Creek Project is the chosen and authorized solution and any other alternative would have only a temporary benefit.

³¹ See Renewal Application dated August 24, 2017, at page 3.

³² Renewal Order at 2; Findings of Fact at 9, 10.

³³ Horowitz comments at 19.

IV. Conclusion

Dominion Energy Virginia respectfully requests that the Secretary grant its Motion and take into consideration this Answer.

Respectfully submitted,

Heum Tuto

Kevin J. Finto

Hunton & Williams, LLP

951 East Byrd Street

Richmond, VA 23219

(804) 788-8568 (Phone)

Counsel for

Virginia Electric and Power Company

Steve R. Pinin

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

120 Tredegar Street

Richmond, VA 23219

(804) 819-2794 (Phone)

Steven R. Pincus

Associate General Counsel

PJM Interconnection, LLC

2750 Monroe Boulevard

Audubon, PA 19403

(610) 666-4370 (phone)

Dated: October 20, 2017

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon:

Pat Hoffman, U.S. Department of Energy Katherine Konieczny, Department of Energy Catherine Jereza, U.S. Department of Energy Rakesh Batra, U.S. Department of Energy Sanjay Narayan, Sierra Club

Dated at Richmond, VA this 20th day of October, 2017.

Kevin J. Finto Hunton & Williams, LLP 951 East Byrd Street Richmond, VA 23219 (804) 788-8568 (Phone) Counsel for Virginia Electric and Power Company Document withheld in full pursuant to Exemption (b)(5)

Mikolop, Todd S.

To:

Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine

Cc:

Finto, Kevin; Michael Regulinski; Pincus, Steven; "sanjay.narayan@sierraclub.org"

Subject:

DOE Order No. 202-17-4: Virginia Electric and Power Company and PJM Interconnection LLC Motion for Leave to

Answer and Answer to Sierra Club"s Petition for Rehearing

Date:

Friday, October 20, 2017 2:27:59 PM

Attachments:

image001.ipg

Virginia Elec. Power FPA 202(c) Motion for Leave to Answer Sierra Club 2nd Rehearing Request 67018691 5.PDF

(Re-sending due to a rejected e-mail address)

Dear Secretary Perry,

On behalf of Kevin Finto, counsel for the Virginia Electric and Power Company (Dominion Energy Virginia), and PJM Interconnection LLC, please find the attached Motion for Leave to Answer and Answer to the Sierra Club's Petition for Rehearing of the DOE's Order No. 202-17-4.

Please contact Mr. Finto or me if you have any questions or require further information regarding this proceeding.

Respectfully submitted,

Todd S. Mikolop



Todd Mikolop

Senior Attorney tmikolop@hunton.com p 202.778.2249 m(b) (6) bio | vCard | blog

Hunton & Williams LLP 2200 Pennsylvania Avenue, NW Washington, DC 20037

hunton.com

Drake, Christopher

To:

Batra, Rakesh

Subject:

RE: Password for non-public PJM 202(c) applications

Date: Monday, October 23, 2017 1:56:26 PM

Sure - I'll be right up

----Original Message-----From: Batra, Rakesh

Sent: Monday, October 23, 2017 1:55 PM

To: Drake, Christopher < Christopher, Drake@hq.doe.gov > Subject: RE: Password for non-public PJM 202(c) applications

Chris:

Could you please stop by (b) (5)

for 5-10 minutes?

Thanks, Rakesh

----Original Message----From: Drake, Christopher

Sent: Monday, October 23, 2017 12:10 PM

To: Konieczny, Katherine < Katherine.Konieczny@Hq.Doe.Gov>

Cc: Batra, Rakeslı < Rakeslı Batra@Hq.Doe.Gov>

Subject: Password for non-public PJM 202(c) applications

Kathy,

(b) (5)

Chris Drake
Attorney-Adviser
U.S. Department of Energy, Office of General Counsel
Office of Electricity & Fossil Energy (GC-76)
Forrestal North, Room 6B-256
Tel. 202.586.2919
Christopher.Drake@hq.doe.gov

Pincus, Steven

To:

Batra, Rakesh

Cc:

Michael Regulinski; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O"Hara, Chris; Konieczny,

Katherine: Mohammed Alfayyoumi

Subject:

RE: Information request PIM and Dominion Responses

Date:

Monday, October 23, 2017 4:57:10 PM

Dear Mr. Batra: PJM and Dominion submits response to the questions below. Please do not hesitate to contact me if you have any questions.

Respectfully submitted,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6)

Steven.Pincus@pim.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Tuesday, October 17, 2017 9:58 AM

To: Pincus, Steven; Michael Regulinski; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O'Hara,

Chris; Burlew, James M. **Subject**: Information request

External Email! Think before clicking links or attachments.

PJM and Dominion:

DOE seeks more information to better understand alternatives to Yorktown Unit 1 & 2 operation. Please provide an initial response to the following questions in writing no later than Wednesday, October 18. Additional information, if any, should be submitted by Monday, October 23.

• According to Appendix II of PJM's June 2017 Application, "PJM has approximately 14 MW of PJM Demand Response available on the peninsula and Dominion Energy Virginia has about 20 MW of Demand Side Management capability on the peninsula in the form of remote air conditioning control as well as the ability to curtail a large industrial customer an average of 75 MWs for transmission emergencies (but the air conditioning control is limited to a total of 120 hours and for 30 days during the summer months). Are those numbers still accurate? If not, what are the correct numbers?

PJM Response: The 14 MWs of PJM Demand Response available on the Virginia Peninsula was based on PJM's analysis for the 2016/2017 Planning Year. This value changes once a year and the value for the 2017/2018 Planning Year is 26 MWs. This change is not material as it does not alter the analysis submitted in the Federal Power Act Section 202(c) application submitted on June 13, 2017 (the "Application") and the renewal application submitted on August 24, 2017 ("Renewal Application"). Of the 26 MWs of Demand Response for the 2017/2018 Planning Year, 14.5 MWs are only available from 6/1 to 9/30, and 11 MW are available from 6/1 to 10/31, and during the month of May. Only 0.7 MWs is available throughout the entire Planning Year. PJM analyses continue to indicate the reliability issues on the Virginia Peninsula cannot be mitigated by the available Demand Response alone and the need to rely on Yorktown Units 1 and 2 remains as stated in the Application and Renewal Application. Most of the reliability problems are voltage related and Demand Response resources are not able to provide the dynamic reactive support that Yorktown 1 and 2 units are capable of providing.

Dominion Response: Dominion Energy Virginia still has available about 20 MW of Demand Side Management capability on the peninsula in the form of remote air conditioning control (limited to a total of 120 hours and for 30 days during the summer months). As stated in Appendix III of the June 13 Application, Dominion Energy Virginia will reserve this capability for the highest need days to reduce load in the North Hampton Roads area on the Virginia Peninsula. With regard to Dominion Energy Virginia's ability to curtail a large industrial customer an average of 75 MWs for transmission emergencies, this curtailment is only available where the customer load is about 99 MW, so that the reduced customer total load is not more than 24 MWs. However, this customer's load during the 2017 summer months has averaged about 40 MWs total, so the 75 MW reduction is not available.

• According to PJM's RTEP Input Assumptions and Scope Whitepaper, Dominion could have a maximum of 130 MW of distributed solar generation available during the summer. Is that number still accurate? If not, what is the correct number?

PJM Response: The 130 MWs of distributed solar generation identified in PJM's RTEP Input Assumptions and Scope Whitepaper while still accurate does not represent "a maximum of 130 MW of distributed solar generation available during the summer." More accurately it represents PJM's forecast of the amount of distributed solar generation that would occur in the entire Dominion zone at typical peaking conditions in 2017. Moreover, distributed solar would already be accounted for in load values for the load forecast studies performed by PJM and Dominion Energy Virginia.

• Neither PJM nor Dominion stated that alternative resources besides demand response and distributed generation, including battery storage, would be available to offset power loss during a scheduled transmission outage. Is that still accurate? If not, what alternative resources are available, and how much power could they provide?

PJM Response: In Appendix II of the Application (and the Renewal Application which incorporates by reference the information from Appendix II), PJM stated that Dominion also "owns and operates on Virginia Peninsula and the oil-fired at the Yorktown Power Station ("Yorktown Unit 3"). While Yorktown Unit 3 with a capacity of 789 MW could, in theory, be available at higher load conditions, Yorktown Unit 3 has limitations which prevent PJM from relying on that unit consistently and for extended periods of time. Yorktown Unit 3 is operating pursuant to a capacity factor limitation to comply with MATS under the rule's limited use oil-fired unit provisions defined in 40 CFR 63.10042. These provisions limit Unit 3's annual capacity factor when burning oil to less than 8 percent of its maximum capacity or nameplate heat input, whichever is less, averaged over a 24 month block contiguous period, the first of which commenced on May 1, 2015, (the first of the month following the compliance date specified in the MATS rule at 40 CFR 63.9984 (April 16, 2015). Exceeding the 8 percent capacity factor limitation would subject the unit to stringent emission limits for particulate matter, mercury, hydrogen chloride and hydrogen fluoride that would require extensive and costly retrofit pollution controls." This information on alternative resources including the available Demand Response as updated above, is still accurate.

• According to the Summary of Findings issued alongside DOE Order No. 202-17-4, the Yorktown coal units offset 950 MW of load that could be shed in a transmission outage. Is

that number still accurate? If not, what is the correct number?

PJM Response: The inforamtion regarding the Remedial Action Scheme or RAS as stated in the Application and Renewal Application is still accurate. Absent the availability of Yorktown Units 1 and 2, upon loss of certain facilities, the RAS will trip the remaining feeds to the Virginia Peninsula which sheds electric service to approximately 950 MWs of load to prevent voltage collapse during certain peak periods.

Thanks, Rakesh Batra 202-586-1283 Document withheld in full pursuant to Exemption (b)(5)

Konieczny, Katherine

To:

Batra, Rakesh; Jereza, Catherine; Drake, Christopher; Rosenbaum, Matthew

Subject:

RE: PJM / Dominion order

Date:

Wednesday, October 25, 2017 10:34:49 AM

Katie and Rakesh,

(b) (5)

-Kathy

-----Original Message-----From: Batra, Rakesh

Sent: Wednesday, October 25, 2017 10:00 AM

To: Jereza, Catherine < Catherine. Jereza@Hq.Doe. Gov>; Konieczny, Katherine

<Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher < Christopher.Drake@hq.doe.gov>

Subject: FW: PJM / Dominion order

Cathy:

(b) (5)

Chris, please let us know if you or Kathy feel otherwise.

Thanks, Rakesh

-----Original Message-----From: Jereza, Catherine

Sent: Wednesday, October 25, 2017 9:35 AM To: Batra, Rakesh Rakesh.Batra@Hq.Doe.Gov

Subject: PJM / Dominion order

Hi Rakesh - (b) (5)

Thanks

Katie

Pincus, Steven

To:

Batra, Rakesh; Michael Regulinski

Cc:

Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject

RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Date:

Wednesday, October 25, 2017 4:16:08 PM

Attachments:

RE Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching.msg

Rakesh: Attached is Mike Regulinski's reply email to your email message dated September 5, 2017.

Please let us know if this is not what you need or if you have any other questions.

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6)

| Steven.Pincus@pim.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Wednesday, October 25, 2017 3:53 PM

To: Michael Regulinski

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; McGlynn, Paul; Bresler,

Frederick S. (Stu) III

Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

External Email! Think before clicking links or attachments.

For some reason the below email from September 5, 2017, was not responded. Could you please provide/clarify the definition of operational limit?

Thanks,

Rakesh

From: Batra, Rakesh

Sent: Tuesday, September 05, 2017 11:40 AM

To: 'Michael Regulinski' < michael.regulinski@dominionenergy.com >

Cc: Pincus, Steven < Steven.Pincus@pjm.com>; Bryson, Mike E. < Michael.Bryson@pjm.com>; Souder,

David W. < <u>David.Souder@pim.com</u>>; Tam, Simon K. < <u>Simon.Tam@pim.com</u>>;

'craig.glazer@pim.com' < craig.glazer@pim.com>; McGlynn, Paul < Paul.McGlynn@pim.com>;

Bresler, Frederick S. (Stu) III < Stu. Bresler@pjm.com>

Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Could you please clarify the definition of operational limit?

Thanks,

Rakesh

From: Michael Regulinski [mailto:michael.regulinski@dominionenergy.com]

Sent: Tuesday, September 05, 2017 11:04 AM

To: Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov >

Cc: Pincus, Steven < Steven-Pincus@pim.com; Bryson, Mike E. < Michael.Bryson@pim.com; Souder,

David W. < <u>David.Souder@pim.com</u>>; Tam, Simon K. < <u>Simon.Tam@pim.com</u>>;

'craig.glazer@pjm.com' <<u>craig.glazer@pjm.com</u>>; McGlynn, Paul <<u>Paul.McGlynn@pjm.com</u>>;

Bresler, Frederick S. (Stu) III < Stu. Bresler@pim.com>

Subject: FW: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Rakesh, here is the information you requested regarding Yorktown Units ${f 1}$ and ${f 2}$. Please let me know

if you have further questions. Mike

	Yorktown 1	Yorktown 2
Name plate (kVA)	200,535	218,000
Min Real Output (MW)	85.0	85.0
Max Real Output (MW)	159.0	164.0
Lagging MVAr	65.0	81.0
Leading MVAr	-50.0	-48.0
Ramp up/down (MW/Min)	1.0	1.4
Operational Limits (MW)	135.0	135.0

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Thursday, August 24, 2017 11:28 AM

To: Pincus, Steven; Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam,

Simon K.

Cc: Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

PJM /Dominion:

Could you please provide us the name plate rating, Min & Max Real and reactive power outputs, Ramp up and down time and any operational limits for both the coal units at Yorktown location?

Thanks, Rakesh

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

Michael Regulinski

To:

Batra, Rakesh

Cc:

Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; McGlynn, Paul; Bresler,

Frederick S. (Stu) III

Subject:

RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Date:

Tuesday, September 05, 2017 6:03:01 PM

External Email! Think before clicking links or attachments.

Rakesh,

The installed capacity rating for Yorktown Units 1 and 2 was lowered to 135 MW each, effective in June, 2017. We directed PJM to lower the values in the PJM eDART system. We have not performed normal long term maintenance on either unit so we have constrained the units to 135 MWs due to operational concerns. This load level allows us to meet the reliability needs of PJM and safely operate the units. We do not plan to operate the units higher than 135 for any reason.

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Tuesday, September 05, 2017 11:40 AM

To: Michael Regulinski (Services - 6)

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; 'craig.glazer@pjm.com'; McGlynn,

Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Could you please clarify the definition of operational limit?

Thanks, Rakesh

From: Michael Regulinski [mailto:michael.regulinski@dominionenergy.com]

Sent: Tuesday, September 05, 2017 11:04 AM **To:** Batra, Rakesh < <u>Rakesh.Batra@Hq.Doe.Gov</u>>

Cc: Pincus, Steven < Steven.Pincus@pim.com; Bryson, Mike E. < Mike E. Mike E. Mike B. Michael.Bryson@pim.com

Souder, David W. < David Souder@pjm.com>; Tam, Simon K. < Simon Tam@pjm.com>;

'craig.glazer@pjm.com' <<u>craig.glazer@pjm.com</u>>; McGlynn, Paul

<Paul.McGlynn@pim.com>; Bresler, Frederick S. (Stu) III < Stu.Bresler@pim.com>

Subject: FW: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching Rakesh, here is the information you requested regarding Yorktown Units 1 and 2. Please let

me know if you have further questions. Mike

	Yorktown 1	Yorktown 2
Name plate (kVA)	200,535	218,000
Min Real Output (MW)	85.0	85.0
Max Real Output (MW)	159.0	164.0
Lagging MVAr	65.0	81.0

Leading MVAr	-50.0	-48.0
Ramp up/down (MW/Min)	1.0	1.4
Operational Limits (MW)	135.0	135.0

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Thursday, August 24, 2017 11:28 AM

To: Pincus, Steven; Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.

Cc: Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date

approaching

PJM /Dominion:

Could you please provide us the name plate rating, Min & Max Real and reactive power outputs, Ramp up and down time and any operational limits for both the coal units at Yorktown location?

Thanks, Rakesh

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Michael Regulinskí

To:

Batra, Rakesh

Cc:

Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; "craiq.qlazer@pim.com"; McGlynn, Paul;

Bresler, Frederick S. (Stu) III

Subject:

RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Date:

Wednesday, October 25, 2017 4:37:29 PM

Attachments:

RE Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching.msg

Rakesh, as we discussed on the phone, we found our response to the September 5 email. I will ask management about the difference between the operational limits shown in our email response and the MW output levels shown in the August 24 Yorktown Run Time report for the July runs.

Thanks,

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

 $C_{2}(p)(6)$

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Wednesday, October 25, 2017 3:53 PM

To: Michael Regulinski (Services - 6)

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; 'craig.glazer@pjm.com'; McGlynn,

Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

For some reason the below email from September 5, 2017, was not responded. Could you please provide/clarify the definition of operational limit?

Thanks, Rakesh

From: Batra, Rakesh

Sent: Tuesday, September 05, 2017 11:40 AM

To: 'Michael Regulinski' < michael.regulinski@dominionenergy.com >

Cc: Pincus, Steven < Steven-Pincus@pim.com>; Bryson, Mike E. < Mike E. Mike E. Mike E. Mike B. Mike B. <a href="mailto:Michael.Bryson.Brys

Souder, David W. < <u>David.Souder@pim.com</u>>; Tam, Simon K. < <u>Simon.Tam@pim.com</u>>;

'craig.glazer@pjm.com' <<u>craig.glazer@pjm.com</u>>; McGlynn, Paul

< Paul.McGlynn@pjm.com>; Bresler, Frederick S. (Stu) III < Stu.Bresler@pjm.com>

Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Could you please clarify the definition of operational limit?

Thanks,

Rakesh

From: Michael Regulinski [mailto:michael.regulinski@dominionenergy.com]

Sent: Tuesday, September 05, 2017 11:04 AM

To: Batra, Rakesh < Rakesh.Batra@Hg.Doe.Gov>

Cc: Pincus, Steven < Steven.Pincus@pjm.com >; Bryson, Mike E. < Michael.Bryson@pjm.com >;

Souder, David W. < <u>David.Souder@pim.com</u>>; Tam, Simon K. < <u>Simon.Tam@pim.com</u>>;

'craig.glazer@pjm.com' <<u>craig.glazer@pjm.com</u>>; McGlynn, Paul

<Paul.McGlynn@pim.com>; Bresler, Frederick S. (Stu) III < Stu.Bresler@pim.com>

Subject: FW: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching Rakesh, here is the information you requested regarding Yorktown Units 1 and 2. Please let me know if you have further questions. Mike

	Yorktown 1	Yorktown 2
Name plate (kVA)	200,535	218,000
Min Real Output (MW)	85.0	85.0
Max Real Output (MW)	159.0	164.0
Lagging MVAr	65.0	81.0
Leading MVAr	-50.0	-48.0
Ramp up/down (MW/Min)	1.0	1.4
Operational Limits (MW)	135.0	135.0

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C:(b)(6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Thursday, August 24, 2017 11:28 AM

To: Pincus, Steven; Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.;

Tam, Simon K.

Cc: Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date

approaching

PJM /Dominion:

Could you please provide us the name plate rating, Min & Max Real and reactive power outputs, Ramp up and down time and any operational limits for both the coal units at Yorktown location?

Thanks, Rakesh

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Konieczny, Katherine

To:

Mills, Brian; Drake, Christopher; Jereza, Catherine; Mumme, Bettina; Batra, Rakesh; Rosenbaum, Matthew

Cc:

Le Duc, Edward

Subject:

RE: Short discussion on factual material for 202(c) rehearing order

Date:

Thursday, October 26, 2017 9:22:18 AM

(b) (5)

Please feel free to reach out for further explanation.

Thanks,

Kathy

----Original Message-----

From: Mills, Brian

Sent: Wednesday, October 25, 2017 2:36 PM

To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher

<Bettina.Mumme@hq.doe.gov>; Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum, Matthew

<Matthew.Rosenbaum@hq.doe.gov>

Cc: Le Duc, Edward <Edward.LeDuc@liq.doe.gov>

Subject: RE: Short discussion on factual material for 202(c) rehearing order

Re: Order No. 202-18-1

(b) (5)

----Original Message-----

From: Konieczny, Katherine

Sent: Friday, October 20, 2017 1:55 PM

To: Drake, Christopher <Christopher.Drake@hq.doe.gov>; Jereza, Catherine <Catherine.Jereza@Hq.Doe.Gov>; Mumme, Bettina <Bettina.Mumme@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum,

Matthew < Matthew.Rosenbaum@hq.doe.gov>; Mills, Brian < Brian.Mills@hq.doe.gov>

Subject: RE: Short discussion on factual material for 202(c) rehearing order

Please use the attached documents instead. I apologize that you received a version with unnecessary comment bubbles and tracked changes.

----Original Appointment----

From: Drake, Christopher

Sent: Thursday, October 19, 2017 5:26 PM

To: Drake, Christopher; Jereza, Catherine; Konieczny, Katherine; Mumme, Bettina; Batra, Rakesh; Rosenbaum,

Matthew

Subject: Short discussion on factual material for 202(c) rehearing order

When: Friday, October 20, 2017 2:00 PM-2:30 PM (UTC-05:00) Eastern Time (US & Canada).

Where: TPTA

File: DRAFT Summary of Findings Order No. 202-18-1 2017-10-19-BM10-20-17 clean.docx >>

Attached is the latest working version of the draft Summary of Findings to accompany the Order on Rehearing. GC-

51 has a few edits that we will incorporate when the time comes.

Michael Regulinski

To:

<u>Batra, Rakesh</u>

Cc:

Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; "craiq.olazer@pim.com"; McGlynn, Paul;

Bresler, Frederick S. (Stu) III

Subject:

RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Date:

Friday, October 27, 2017 2:48:36 PM

Rakesh, you requested an explanation of the difference between the operational limits for Yorktown Units 1 and 2 which were lowered to 135 MW each, effective in June, 2017, and the MW output levels shown in the Yorktown July 2017 Run Time report for the July 11-25 runs directed by PJM and reported to DOE on August 24, which exceeded 135 MWs on several occasions.

The MW values provided in the Yorktown Run Time report for the July runs reflect the gross values of plant MW output. Emission data is determined on gross MW values. The 135 MW operational limit reflects the net MW output of the plant, which is the gross output of the units reduced by station auxiliary power, which is the power needed to operate the station itself and the generation units

Please let me know if you have additional questions. Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Michael Regulinski (Services - 6)

Sent: Wednesday, October 25, 2017 4:37 PM

To: 'Batra, Rakesh'

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; 'craig.glazer@pjm.com'; McGlynn,

Paul: Bresler, Frederick S. (Stu) III

Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Rakesh, as we discussed on the phone, we found our response to the September 5 email. I will ask management about the difference between the operational limits shown in our email response and the MW output levels shown in the August 24 Yorktown Run Time report for the July runs.

Thanks,

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Wednesday, October 25, 2017 3:53 PM

To: Michael Regulinski (Services - 6)

Cc: Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; 'craig.glazer@pjm.com';

McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching For some reason the below email from September 5, 2017, was not responded. Could you please provide/clarify the definition of operational limit? Thanks, Rakesh

From: Batra, Rakesh

Sent: Tuesday, September 05, 2017 11:40 AM

To: 'Michael Regulinski' < michael.regulinski@dominionenergy.com>

Cc: Pincus, Steven < Steven.Pincus@pim.com >; Bryson, Mike E.

< Michael Bryson@pjm.com>; Souder, David W. < David.Souder@pjm.com>; Tam,

Simon K. < Simon K. Simon K. <a href="mailto

McGlynn, Paul < Paul. McGlynn@pjm.com>; Bresler, Frederick S. (Stu) III

<Stu.Bresler@pim.com>

Subject: RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Could you please clarify the definition of operational limit?

Thanks, Rakesh

From: Michael Regulinski [mailto:michael.regulinski@dominionenergy.com]

Sent: Tuesday, September 05, 2017 11:04 AM **To:** Batra, Rakesh < Rakesh, Batra@Hq.Doe.Gov>

Cc: Pincus, Steven <<u>Steven.Pincus@pim.com</u>>; Bryson, Mike E.

<<u>Michael.Bryson@pim.com</u>>; Souder, David W. <<u>David.Souder@pjm.com</u>>; Tam,

Simon K. < Simon. Tam@pjm.com >; 'craig.glazer@pjm.com' < craig.glazer@pjm.com >;

McGlynn, Paul < Paul McGlynn@pim.com>; Bresler, Frederick S. (Stu) III

<<u>Stu.Bresler@pim.com</u>>

Subject: FW: Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching

Rakesh, here is the information you requested regarding Yorktown Units 1 and 2.

Please let me know if you have further questions. Mike

	Yorktown 1	Yorktown 2
Name plate (kVA)	200,535	218,000
Min Real Output (MW)	85.0	85.0
Max Real Output (MW)	159.0	164.0
Lagging MVAr	65.0	81.0
Leading MVAr	-50.0	-48.0
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Operational Limits (MW)	135.0	135.0

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Thursday, August 24, 2017 11:28 AM

To: Pincus, Steven; Michael Regulinski (Services - 6); Bryson, Mike E.; Souder,

David W.; Tam, Simon K.

Cc: Glazer, Craig; McGlynn, Paul; Bresler, Frederick S. (Stu) III

Subject: [External] RE: Emergency Order Pursuant to FPA 202(c) - Renewal Due

date approaching PJM /Dominion:

Could you please provide us the name plate rating, Min & Max Real and reactive power outputs, Ramp up and down time and any operational limits for both the coal units at Yorktown location?

Thanks, Rakesh

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Konieczny, Katherine

To:

Batra, Rakesh; Rosenbaum, Matthew; Jereza, Catherine; Mills, Brian

Subject:

202(c) order on rehearing draft summary of findings

Date:

Monday, October 30, 2017 5:28:57 PM

Attachments:

DRAFT Summary of Findings Order No. 202-18-1 2017-10-30 445pm.docx

Importance:

High

Hello. The most recent draft summary of findings is attached and reflects feedback we received from Matt and Rakesh in response to questions. As always, please review the entire document for accuracy. (b) (5)

Thank you, Kathy

Katherine (Kathy) Konieczny Acting Assistant General Counsel for Electricity and Fossil Energy Forrestal 6D-033 (202) 586-0503 Katherine.Konieczny@hq.doe.gov

Konieczny, Katherine

To:

Batra, Rakesh; Drake, Christopher

Cc:

Bittner, Kathy (CONTR); Jereza, Catherine; Rosenbaum, Matthew

Subject:

RE: Rehearing Order

Date:

Monday, October 30, 2017 5:30:28 PM

Rakesh, DOJ and OE were provided with the latest draft today, and EPA received the excerpt that concerns that agency, and I expect to receive rolling comments. (b) (5)

From: Batra, Rakesh

Sent: Monday, October 30, 2017 11:43 AM

To: Konieczny, Katherine ; Drake, Christopher ; King-Gilmore, Christy **Cc:** Bittner, Kathy (CONTR) ; Jereza, Catherine ; Rosenbaum, Matthew

Subject: Rehearing Order

Could you please update the status of the Siera Club Rehearing order?

When can we expect the final draft?

I need to update Kathy Bittner.

Thanks, Rakesh

Konieczny, Katherine

To:

Batra, Rakesh; Rosenbaum, Matthew

Cct

Drake, Christopher

Subject: Date: RE: 202(c) Tuesday, October 31, 2017 12:40:08 PM

PRIVILEGED - ATTORNEY CLIENT - ATTORNEY WORK-PRODUCT

Great! We'll swing by at 1:30. (b) (5)

----Original Message----

From: Batra, Rakesh

Sent: Tuesday, October 31, 2017 12:31 PM

To: Konieczny, Katherine < Katherine. Konieczny@Hq.Doe.Gov>; Rosenbaum, Matthew

<Matthew.Rosenbaum@hq.doe.gov>

Subject: RE: 202(c)

Sure, you can stop by any time. (b) (6)

----Original Message-----

From: Konieczny, Katherine

Sent: Tuesday, October 31, 2017 11:50 AM

To: Batra, Rakesh < Rakesh Batra@Hq.Doe.Gov>; Rosenbaum, Matthew < Matthew.Rosenbaum@liq.doe.gov>

Subject: 202(c)

Do you have time early this afternoon to discuss another technical question that have come up?

Thanks,

Kathy

Katherine (Kathy) Konieczny
Acting Assistant General Counsel for Electricity and Fossil Energy
Forrestal 6D-033
(202) 586-0503
Katherine.Konieczny@hq.doe.gov

Michael Regulinski <u>Batra, Rakesh</u>

To: Subject:

Yorktown Unit 3

Date:

Wednesday, November 01, 2017 5:18:23 PM

We are gathering the data you requested and expect to get it to you COB Thursday.

Sent from my iPhone

Please excuse weird auto corrections

Michael Regulinski Batra, Rakesh

To: Subject:

Re: Yorktown 3 data

Date:

Thursday, November 02, 2017 10:18:06 AM

Should get it to you by noon.

Sent from my iPhone Please excuse weird auto corrections

On Nov 1, 2017, at 5:02 PM, Batra, Rakesh < Rakesh Batra@Hq.Doe.Gov > wrote:

COB Thursday will not work. Need it before noon. Thanks

From: Michael Regulinski < happypop9000@gmail.com>

Date: Wednesday, Nov 01, 2017, 4:44 PM

To: Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov > Cc: Steven R. Pincus < Steven.Pincus@pjm.com >

Subject: Yorktown 3 data

Rakesh, the engineers are digging up the data you requested. Our ETA is Thursday COB. Thanks Mike

Sent from my iPhone Please excuse weird auto corrections

Drake, Christopher

To:

Batra, Rakesh

Subject: Date: E-mails for the Summary of Findings Thursday, November 02, 2017 10:54:09 AM

Importance:

High

Rakesh,

We're collecting the supporting documents for the Summary of Findings to go with the 202(c) order. Could you please save the following emails as pdfs and send them to me?

- Email from S. Pincus to R. Batra (Oct. 23, 2017)
- Email from M. Regulinski to R. Batra (Sept. 5, 2017)
- Email from M. Regulinski to R. Batra (Oct. 27, 2017)

(b)(5)

Also, if you could share the draft action memo with us as soon as you can, that would be great!

Thanks for all your help & talk to you soon

Chris Drake

Attorney-Adviser

U.S. Department of Energy, Office of General Counsel

Office of Electricity & Fossil Energy (GC-76)

Forrestal North, Room 6B-256

Tel. 202.586.2919

Christopher.Drake@hq.doe.gov

Michael Regulinski

To:

Batra, Rakesh

Cc:

Pincus, Steven; Sharon L. Burr; Rick R Linker; Miranda R Yost; Mohammed Alfayyoumi; Mike Barmer

Subject:

DOE Informal Question

Date: Attachments: Thursday, November 02, 2017 11:01:41 AM YT3 Days of Operation 2014 2016.xisx

Rakesh, here is the information you requested Tuesday night over the phone regarding Yorktown Unit 3 operations. The following chart reflects Unit 3 operation presented in the same manner we provided the information for Units 1 and 2.

	Yorktown 3
Name plate (kVA)	980,000
Min Real Output (MW)	300.0
Max Real Output (MW)	789.0
Lagging MVAr	300.0
Leading MVAr	-180.0
Ramp up/down (MW/Min)	5.0
Operational Limits (MW)	789.0

Attached are YT 3 days of operations from 2014 thru 2016. We rounded to full days because that is what our records contain.

The Top 5 reasons for Yorktown 3 reliability concerns are as follow.

- 1. Structural duct work and dampers repairs
- 2. LP Turbine inspections/repairs
- 3. Waterbox repairs
- 4. Turbine valve work/repairs
- 5. Various Boiler tube leaks

Please call my cell if you need additional information (b) (6)

Thanks, Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

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Yorktown-3: Days of Operation 01/2014 - 12/2016

Yorktown-3: 01/2014 - 12/2016: Total Run Times

TOTALOWIT-5.	01/2014 - 12/20	10. TOLUT NUIT TIMES
Start Date	End Date	Duration (Days)
1/6/2014	1/9/2014	3
1/20/2014	1/22/2014	2
1/23/2014	1/24/2014	1
1/27/2014	1/31/2014	4
8/20/2014	8/23/2014	3
8/25/2014	8/27/2014	2
1/1/2015	1/1/2015	0
1/7/2015	1/9/2015	2
2/2/2015	2/5/2015	3
2/14/2015	2/21/2015	7
6/14/2015	6/16/2015	2
7/19/2015	7/21/2015	2
7/26/2015	7/30/2015	4
8/3/2015	8/7/2015	4
12/14/2015	12/15/2015	1
1/12/2016	1/14/2016	2
2/11/2016	2/15/2016	4
6/2/2016	6/4/2016	2
7/23/2016	7/26/2016	3
8/30/2016	9/1/2016	1
11/30/2016	12/2/2016	2
		54
	_	

From: To: <u>Drake, Christopher</u> <u>Batra, Rakesh</u>

Subject

RE: DOE Informal Question

Date:

Thursday, November 02, 2017 11:17:03 AM

Great — thanks for this, Rakesh. And can you please send me this e-mail as a pdf, along with the other three e-mails (Sept. 5, Oct. 23, Oct. 27)?

From: Batra, Rakesh

Sent: Thursday, November 02, 2017 11:15 AM

To: Konieczny, Katherine; Drake, Christopher; Rosenbaum, Matthew; Mills, Brian

Subject: FW: DOE Informal Question

Additional information about Yorktown Unit #3. In the past 3 years they ran Unit #3 for only 54 days.

From: Michael Regulinski [mailto:michael.regulinski@dominionenergy.com]

Sent: Thursday, November 02, 2017 11:01 AM **To:** Batra, Rakesh Rakesh.Batra@Hq.Doe.Gov

Cc: Pincus, Steven < Steven.Pincus@pim.com >; Sharon L. Burr

<sharon.l.burr@dominionenergy.com>; Rick R Linker <rick.r.linker@dominionenergy.com>; Miranda

R Yost < Miranda, R. Yost@dominionenergy.com >; Mohammed Alfayyoumi

<mohammed.alfayyoumi@dominionenergy.com>; Mike Barmer

<mike.barmer@dominionenergy.com>

Subject: DOE Informal Question

Rakesh, here is the information you requested Tuesday night over the phone regarding Yorktown Unit 3 operations. The following chart reflects Unit 3 operation presented in the same manner we provided the information for Units 1 and 2.

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Ramp up/down (MW/Min)	5.0
Operational Limits (MW)	789.0

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The Top 5 reasons for Yorktown 3 reliability concerns are as follow.

- 1. Structural duct work and dampers repairs
- 2. LP Turbine inspections/repairs
- 3. Waterbox repairs
- 4. Turbine valve work/repairs
- 5. Various Boiler tube leaks

Please call my cell if you need additional information (b) (6)

Thanks, Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

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Drake, Christopher

To:

Batra, Rakesh

Subject: Date: RE: E-mails for the Summary of Findings Thursday, November 02, 2017 11:28:04 AM

Excellent – thank you! Exactly what we're looking for

From: Batra, Rakesh

Sent: Thursday, November 02, 2017 11:26 AM

To: Drake, Christopher < Christopher. Drake@hq.doe.gov>

Subject: RE: E-mails for the Summary of Findings

<< File: RE_ Information request PJM and Dominion Responses Oct 23.pdf >> << File: FW_ Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching Sept 5.pdf >> << File: RE_ Emergency Order Pursuant to FPA 202(c) - Renewal Due date approaching Oct 27.pdf >>

From: Drake, Christopher

Sent: Thursday, November 02, 2017 10:54 AM **To:** Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov> **Subject:** E-mails for the Summary of Findings

Importance: High

Rakesh,

We're collecting the supporting documents for the Summary of Findings to go with the 202(c) order. Could you please save the following emails as pdfs and send them to me?

- Email from S. Pincus to R. Batra (Oct. 23, 2017)
- Email from M. Regulinski to R. Batra (Sept. 5, 2017)
- Email from M. Regulinski to R. Batra (Oct. 27, 2017)

(b) (5)

Also, if you could share the draft action memo with us as soon as you can, that would be great!

Thanks for all your help & talk to you soon

Chris Drake

Attorney-Adviser

U.S. Department of Energy, Office of General Counsel

Office of Electricity & Fossil Energy (GC-76)

Forrestal North, Room 6B-256

Tel. 202.586.2919

Christopher.Drake@hq.doe.gov

Konieczny, Katherine

To:

Batra, Rakesh; Drake, Christopher; Rosenbaum, Matthew; Mills, Brian

Cc:

Jereza, Catherine

Subject: Date:

RE: 202 (C) Rehearing Request Order Thursday, November 02, 2017 2:30:17 PM

Attachments:

Compare order 202-18-1.docx Compare Summary of Findings.docx

DRAFT Order 202-18-1 2017-11-1.docx

DRAFT Summary of Findings Order No. 202-18-1 2017-11-2 2pm CLEAN.docx

Importance:

The latest drafts of both Order No. 202-18-1 and the Summary of Findings are attached. (Compared to the versions we emailed you on Monday) Please let us know if you have any concerns/questions/edits. (b) (5)

----Original Message----

From: Konieczny, Katherine

Sent: Thursday, November 02, 2017 2:13 PM

To: Batra, Rakesh < Rakesh. Batra@Hq.Doe.Gov>; Drake, Christopher < Christopher.Drake@hq.doe.gov>;

Rosenbaum, Matthew < Matthew. Rosenbaum@hq.doe.gov>

Subject: RE: 202 (C) Rehearing Request Order

(b) (5)

and I'll have a new draft to you in the next few minutes for your

review. (b) (5)

Should I send the final to Katie and Kathy B when it's ready? Who has the action memo?

----Original Message----

From: Batra, Rakesh

Sent: Thursday, November 02, 2017 2:11 PM

To: Konieczny, Katherine <Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher

<Christopher.Drake@hq.doe.gov>; Rosenbaum, Matthew <Matthew.Rosenbaum@hq.doe.gov>

Subject: 202 (C) Rehearing Request Order

Kathy & Chris,

Matt and I stopped by your offices couple of times today. (b) (6)

anything we can help you with before we leave, please let us know.

If there is

Thanks,

Rakesh Batra

202-586-1283

Jereza, Catherine

To:

Bittner, Kathy (CONTR)

Cc:

Konieczny, Katherine; Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew

Subject:

FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Date:

Monday, November 06, 2017 3:36:29 PM

Attachments:

Signed Order 202-18-1.pdf

Hi Kathy — do you have the electronic version that includes John Lucas' edits? Can you send so we can make sure the right version goes out.

Once we have that, I'll be sending the email out below.

Thanks!

Katie

From: Jereza, Catherine

To: Steven.Pincus@pjm.com; craig.glazer@pjm.com; michael.regulinski@dominionenergy.com; sanjay.narayan@sierraclub.org; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org

Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine

Subject: DOE Order 202-18-1

Good evening,

Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are attached.

Regards,

Katie

From: Bittner, Kathy (CONTR)

Sent: Monday, November 06, 2017 3:07 PM

To: Jereza, Catherine **Cc:** Rosenbaum, Matthew

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

HI Katie and Matt,

Just wanted to make sure that you are aware that the order was signed (see attached).

Let me know if you need anything else.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)

Sent: Friday, November 03, 2017 3:31 PM

To: Jereza, Catherine < <u>Catherine.Jereza@Hq.Doe.Gov</u>>

Cc: Rosenbaum, Matthew < Matthew.Rosenbaum@hq.doe.gov>
Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

FYI..I took the package to Exec Sec. It has cleared Exec Sec review and is with the Deputy Secretary

now.

Have a great weekend.

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine

Sent: Friday, November 03, 2017 12:35 PM

To: Bittner, Kathy (CONTR) < Kathy.Bittner@hq.doe.gov

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – I'm in my office now.

Cheers Katie



Department of Energy

Washington, DC 20585

Order No. 202-18-1

Order No. 202-17-4, dated September 14, 2017, authorizes the operation of coal-fired Yorktown Power Station Units 1 and 2, only for reliability purposes and under strict conditions, through December 13, 2017. I issued that Order by my authority under section 202(c) of the Federal Power Act (FPA), 16 U.S.C. § 824a(c). On October 6, 2017, Sierra Club moved to intervene and petitioned for rehearing of Order No. 202-17-4, pursuant to FPA section 313(a), 16 U.S.C. § 825l(a). On October 20, the Virginia Electric and Power Company (Dominion) and PJM Interconnection LLC (PJM) filed a motion for leave to answer and answer to Sierra Club's petition, including a point of order wherein Dominion sought clarification that it is a party of right.

Sierra Club's motion to intervene is hereby granted. The Department takes no position, however, on whether Sierra Club is an "aggrieved" party for purposes of FPA section 313. The Dominion and PJM motion for leave to answer is granted, and the answer is accepted. Dominion is recognized as a party to this proceeding.

As explained in the accompanying Summary of Findings, incorporated here by reference, Sierra Club's petition for rehearing is denied.

Issued in Washington, D.C. this 6th day of November, 2017.

Rick Perry

Secretary of Energy

Bittner, Kathy (CONTR)

To:

Jereza, Catherine

Cc:

Konieczny, Katherine; Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew

Subject:

RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Date:

Monday, November 06, 2017 3:38:50 PM

Attachments:

Summary of Findings Order No. 202-18-1 2017-11-3 930am.docx

Sure, here it is.

From: Jereza, Catherine

Sent: Monday, November 06, 2017 3:36 PM

To: Bittner, Kathy (CONTR)

Cc: Konieczny, Katherine ; Drake, Christopher ; Batra, Rakesh ; Rosenbaum, Matthew

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy — do you have the electronic version that includes John Lucas' edits? Can you send so we can make sure the right version goes out.

Once we have that, I'll be sending the email out below.

Thanks!

Katie

From: Jereza, Catherine

To: <u>Steven.Pincus@pjm.com</u>; <u>craig.glazer@pjm.com</u>; <u>michael.regulinski@dominionenergy.com</u>; <u>sanjay.narayan@sierraclub.org</u>; <u>casey.roberts@sierraclub.org</u>; <u>bridget.lee@sierraclub.org</u>

Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine

Subject: DOE Order 202-18-1

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Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are attached.

Regards,

Katie

From: Bittner, Kathy (CONTR)

Sent: Monday, November 06, 2017 3:07 PM

To: Jereza, Catherine < Catherine. Jereza@Hq. Doe. Gov>

Cc: Rosenbaum, Matthew < Matthew.Rosenbaum@hq.doe.gov > Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

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Let me know if you need anything else.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)

Sent: Friday, November 03, 2017 3:31 PM

To: Jereza, Catherine < Catherine Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew < <u>Matthew.Rosenbaum@hq.doe.gov</u>>

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

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now.

Have a great weekend.

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine

Sent: Friday, November 03, 2017 12:35 PM

To: Bittner, Kathy (CONTR) < Kathy.Bittner@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – I'm in my office now.

Cheers Katie

Summary of Findings Department of Energy Order No. 202-18-1

November 6, 2017

Section 202(c) of the Federal Power Act (FPA) (codified at 16 U.S.C. § 824a(c)), through section 301(b) of the Department of Energy Organization Act (codified at 42 U.S.C. § 7151(b)), authorizes the Secretary of Energy, upon finding "that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes," to issue an order "requir[ing]... such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary's] judgment will best meet the emergency and serve the public interest." 16 U.S.C. § 824a(c)(1). If the order "may result in a conflict with [an] environmental law or regulation," then the Secretary must "ensure that such order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent with any applicable . . . environmental law or regulation and minimizes any adverse environmental impacts." Id. § 824a(c)(2). Orders issued under FPA section 202(c) "that may result in a conflict with [an] environmental law or regulation" expire 90 days after they are issued, but the Secretary "may renew or reissue such order[s]... for subsequent periods, not to exceed 90 days for each period, as [the Secretary] determines necessary to meet the emergency and serve the public interest." *Id.* § 824a(c)(4)(A).

Order No. 202-17-4 (the September Order), issued on September 14, 2017, authorizes the operation of coal-fired Yorktown Power Station Units 1 and 2 pursuant to section 202(c), for reliability purposes only and under strict conditions, through December 13, 2017. On October 6, 2017, Sierra Club moved to intervene and petitioned for rehearing of the September Order pursuant to FPA section 313(a), 16 U.S.C. § 825*l*(a). Sierra Club's Motion Petition for Rehearing, and Motion to Intervene (Oct. 6, 2017) (Petition). On October 20, 2017, the Department of Energy (DOE or Department) received an answer to Sierra Club's petition from the Virginia Electric and Power Company (Dominion) and PJM Interconnection LLC (PJM). On October 23, 2017, PJM responded to a list of questions from the Department's Office of Electricity Delivery and Energy Reliability, and further clarifications from PJM and Dominion are noted below.

¹ Issuance of today's Order falls within the timeframe provided under FPA section 313(a). See 16 U.S.C. § 825/(a) ("Unless the [Secretary] acts upon [an] application for rehearing within thirty days after it is filed, such application may be deemed to have been denied."); 10 C.F.R. § 205.5(a)(1); see also Kan. Cities v. FERC, 723 F.2d 82, 85 n.2 (D.C. Cir. 1983) (affirming the Federal Energy Regulatory Commission (FERC) regulatory interpretation of a section 313(a) deadline extension to fall on a business day).

For the reasons discussed in this Summary of Findings, and as reflected in Order No. 202-18-1, Sierra Club's petition for rehearing is denied.

Sierra Club raises two categories of objections to the Department's compliance with FPA section 202(c):

- (1) The Department's failure to (a) properly consult with EPA under Section 202(c) and to (b) add further measures to reduce the Yorktown Units' hours of operation and emissions; and
- (2) The Department's failure to properly assess the impacts of its action under the National Environmental Policy Act and its reliance on an inapplicable categorical exclusion.

The Department's objective was, and remains, to minimize the use of either unit, in light of environmental considerations, without compromising or jeopardizing the reliability of the power grid in the North Hampton Roads area. To accomplish this, the Department must balance competing challenges to arrive at a solution that "in [the Secretary's] judgment will best meet the emergency and serve the public interest." 16 U.S.C. § 824a(c)(1).

The Department Complied with Section 202(c) of the Federal Power Act

A key component of the Sierra Club's first objection is its claim that DOE did not fulfill the statute's consultation requirement. The Sierra Club, however, misreads section 202(c), arguing for a scope and procedural complexity of consultation that is not found in the statute. In renewing or reissuing certain orders under section 202(c), the statute requires DOE to "consult with the primary Federal agency with expertise in the environmental interest protected by [a conflicting] law or regulation" and to "include in any such renewed or reissued order such conditions as such Federal agency determines necessary to minimize any adverse environmental impacts to the extent practicable." 16 U.S.C. § 824a(c)(4)(B).

In this case, DOE consulted with the relevant federal agency, the U.S. Environmental Protection Agency (EPA). Following consultation, EPA concurred in writing with the Department's approach in the September Order. EPA did not recommend or propose further conditions on matters within its purview in the September Order or indicate that additional or different consultation with EPA was desired. The FPA does not specify procedures or substantive requirements for consultation under this provision. Rather, it requires only that a consultation take place and, if the consulted agency (here, EPA) proposes additional conditions in a renewal order, that such conditions be included in the order unless DOE "determines that such condition would prevent the order from adequately addressing the emergency" and publicly explains its determination. Here, EPA recommended no additional conditions. Rather, EPA expressly acknowledged the

September Order's consistency with EPA's April 2016 Administrative Compliance Order (ACO) and expressed no concerns about DOE's approach.

Indeed, the statute expressly recognizes that, as occurred here, the consulted agency might not propose further conditions: "[t]he conditions, if any, submitted by such Federal agency shall be made available to the public." Id. (emphasis added). Thus, Sierra Club incorrectly reads the statute as requiring the consulted agency (i.e., EPA) to verify, independently, DOE's compliance with FPA section 202(c)(2). The statute contains no such requirement or mechanism for such independent verification. Rather, FPA section 202(c)(4) provides the consulted agency the opportunity to propose conditions in a DOE order that would either supplement or substitute for conditions to be ordered by DOE and as to which DOE has discretion to accept or reject, subject to the requirement to explain its reasoning. Sierra Club incorrectly seeks to transform this consultation process from one in which an agency with specific environmental expertise advises DOE on conditions to one in which the consulted agency exercises an oversight role and must approve DOE's actions. However, Sierra Club offers no support for that interpretation, and DOE finds nothing in the text of the statute to support such an interpretation. DOE's consultation with EPA prior to issuing the September Order satisfied the statutory requirements.²

Next, Sierra Club suggests that alternative sources of power can and should replace Yorktown Units 1 and 2 generation during transmission outages or high load conditions, either of which could trigger the Remedial Action Scheme (RAS) that automatically sheds roughly 950 MW of load to prevent voltage collapse. See Summary of Findings for Department of Energy Order No. 202-17-4, at 4 (Sept. 14, 2017) (Summary of Findings). Notably, the Sierra Club acknowledges that the challenged September Order requires PJM and Dominion to exhaust available resources, including demand response and behind-themeter generation resources, prior to operating Yorktown Units 1 or 2. Petition at 9-10. This reduces Sierra Club's objection to the fact that the September Order does not require the consideration of additional resources that may become available "over the course of the emergency." Id. at 10. In other words, Sierra Club concedes that the Department correctly evaluated available alternatives but quibbles that the Department should have analyzed speculative new resources as well.

While the Department does not oppose the use of alternative power sources generally, it explained in the September Order that, in its judgment and based on the record before it, the available alternative power cannot fully compensate for the loss of Yorktown Units 1 and 2 generation, and would therefore not suffice to preserve the reliability of the North Hampton Roads grid:

² Informal communications with EPA staff have continued. Despite learning of the Sierra Club's arguments in the October 6 petition, EPA personnel have not expressed an intent to add conditions.

The only sufficient alternative to the RAS and its resulting outages for up to approximately 150,000 customers is the emergency operation of Yorktown Units 1 and 2. The demand response available to PJM is a small fraction of the load threshold and is "not sufficient to ensure reliable service." Likewise, Dominion has limited demand-side management and curtailment capabilities, insufficient for reliability purposes even when fully deployed.

Id. at 6 (citations omitted).

Both the Department's June 2017 and September 2017 orders specifically require the minimum use of Yorktown Units 1 and 2 that preserves system reliability—and, in fact, PJM and Dominion emphasize that "[h]istory and future projections show that the need [for operation of Yorktown Units 1 and 2] is far less than full time and, in total, may only amount to 81 days over the entire 18-20 month [transmission upgrade] period." Motion for Leave to Answer and Answer of Virginia Electric & Power Company and PJM Interconnection LLC, at 10 (Oct. 20, 2017) (Answer). Under section 202(c), the Department is authorized "to require by order such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary's] judgment will best meet the emergency and serve the public interest." The requirement is conjunctive, not disjunctive. The Department acknowledges that minimizing the use of Yorktown Units 1 and 2, both of which were planned to be retired by now, is in the public interest, along with exploring alternative power sources. In the Secretary's judgment, however, reliance on alternative power sources alone, such as those Sierra Club suggests, does not best meet the emergency. The public interest is not served by the RAS being needlessly activated and power being shut off to 150,000 customers and hundreds of thousands of people—which would be the result of insufficient generation during a transmission outage.

In assessing the need for an emergency order under section 202(c), the Department independently evaluates the situation, but it is not required to determine every reasonable alternative. The statute requires only that the Secretary use his or her best judgment to meet the emergency and serve the public interest. That judgment includes the determination of which factors play a central role in a given emergency and the weight to assign each such factor. In this situation, the expertise of the applicant was an important factor. The Department received an application from PJM, which is not only the regional transmission organization responsible for managing a transmission system across twelve states and the District of Columbia, but also holds the highest-level, federally-regulated reliability responsibilities for the system it manages. Summary of Findings at 2. The Department's independent analysis of PJM's request took into account the extensive earlier reviews conducted by PJM in evaluating the proposed solution. *Id.* at 2-3. Although DOE is not obligated to analyze the viability of alternative resources (especially at the unit level, which is an unbounded analysis if DOE were to consider potential new resources), the

following analysis broadly explains the rationale behind dispatching Yorktown Units 1 and 2 instead of other categories of alternative resources.

The alternatives Sierra Club presents for consideration (namely expanded demand response and distributed generation resources as well as battery storage) do not best meet the emergency because, unlike Yorktown Units 1 and 2, they cannot guarantee enough dispatchable power, both real³ and reactive,⁴ during excessive load periods or transmission outages. Reliance on alternatives to Yorktown Units 1 and 2 would require both real and reactive power supply, and achieving that over the anticipated remaining emergency timeframe⁵ is infeasible due to a combination of technical and market challenges. The precise amount of dispatchable power needed to replace Yorktown Units 1 and 2 varies based on a combination of the system configuration (*e.g.*, whether any other facilities are offline) and load. The Department's analysis reasonably focused on the worst-case scenario, which would draw on the full output of both Units 1 and 2, or 270 MW (net), and also have the option of providing reactive power support. The combined capacity of all currently-available alternatives does not reach 270 MW (net), and the Department explains below why those alternative resources, even if combined, are unlikely to become sufficient substitutes over the remaining emergency timeframe.

First, relying on available demand response is inadequate because it cannot provide sufficient reactive power support. Demand response is only a load reduction measure. Both real power and reactive power are critical to maintaining system reliability, and while demand response decreases both real power demand and reactive power demand, it does not generate power. The available demand response resources are few in number, and there is no indication in the record that market incentives could substantially and rapidly increase demand response over the anticipated emergency timeframe. PJM reports that it

³ The North American Electric Reliability Corporation (NERC) Glossary, as adopted by the NERC Board of Trustees, defines "real power" as "[t]he portion of electricity that supplies energy to the Load" — that is, to customers. Glossary of Terms Used in NERC Reliability Standards (updated Oct. 6, 2017), http://www.nerc.com/files/glossary of terms.pdf.

⁴ The NERC Glossary defines "reactive power" as "[t]he portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive Power must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive Power is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar)." *Id.*

⁵ This analysis applies to both the 90-day term of Order No. 202-17-4 and the estimated remaining time for the Skiffes Creek Transmission Project. The latter is expected to take 18-20 months. Four months have passed since construction commenced.

⁶ When load is reduced, the requisite reactive power required by the system is proportionally reduced. DOE does not treat that as reactive power support akin to the ancillary services provided by Yorktown Units 1 and 2, however, because demand response merely removes the need for some reactive power support rather than actively providing it.

has approximately 26 MW of demand response available during the 2017/2018 Planning Year, but just 0.7 MW of demand response resources are available year-round. Email from S. Pincus to R. Batra (Oct. 23, 2017), included in the docket of this Order. Additionally, Dominion reports that it has roughly 20 MW of Demand Side Management capability—specifically, remote air conditioning control, limited to a total of 120 hours and 30 days during the summer months. *Id.* Dominion also can curtail a large industrial customer by an average of 75 MW for transmission emergencies, but this curtailment is available only when the customer's load is about 99 MW, so that the reduced customer load is not more than 24 MW. *Id.* Even during the summer of 2017, the customer's load averaged 40 MW, well below the threshold for load curtailment. *Id.* Demand response is a voluntary program that even participating customers can decline to follow (at risk of contractual penalties). As such, PJM or Dominion cannot guarantee load reduction from demand response. Even if demand response were compulsory, it cannot provide reactive power benefits equivalent to generation units. For all of these reasons, reliance on demand response is not a workable solution to the reliability concerns at issue.

Second, distributed energy resources, such as rooftop solar and other behind-themeter generation, also are insufficient to address the reliability concerns. Like demand response, behind-the-meter generation reduces the load a utility serves. But unlike demand response, distributed energy resources have the potential of adding supply to the system. This benefit is reduced, however, by two issues: (1) distributed energy resources are not assured because their availability depends on variable factors, such as solar radiation; and (2) reactive power support from distributed energy resources cannot be aggregated in a linear fashion, making its benefits too geographically constrained to be useful across the same area served by Yorktown Units 1 and 2. Distributed energy resources or behind-themeter programs are also voluntary. Hence, customers cannot be compelled to install or use behind-the-meter generation. Current available resources are insufficient, and fundamental questions about how to fairly compensate owners likely preclude substantial shifts in this resource over the anticipated emergency timeframe. Thus, relying on

⁷ The annual availability schedule is as follows: 0.7 MW from January through April, 11 MW in May, 25.5 MW from June through September, 11 MW in October, and 0.7 MW from November to December.

⁸ PJM's forecast for distributed solar generation across the entire Dominion zone—not the smaller North Hampton Roads area—is 130MW (real power) at typical peaking conditions. Email from S. Pincus to R. Batra (Oct. 23, 2017). In weather patterns unfavorable to solar power generation, that number could drop to zero.

⁹ Earlier this year, FERC outlined the challenges in pricing sales of distributed energy back to the grid. See Policy Statement, Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery, 158 FERC ¶ 61,051 (Jan. 19, 2017). An "electric storage resource" is "a resource capable of receiving electric energy from the grid and storing it for later injection of electricity back to the grid." Indianapolis Power & Light Co. v. Midcontinent Indep. Sys. Operator, Inc., 158 FERC ¶ 61,107 at P 6 n.14 (Feb. 1, 2017). That definition "include[s] all types of electric storage technologies, regardless of their size, storage medium (e.g., batteries, flywheels, pumped-hydro), or whether located on the interstate grid or on a distribution system." Id.

variable or intermittent resources for reactive power is not a solution to reliability concerns.

Finally, rechargeable battery storage, even if technically feasible, ¹⁰ is not a viable solution because it would require a substantial financial outlay for long-life equipment to address a short-term problem that could be resolved in as little as 14 months when the Skiffes Creek Transmission Project comes online. To serve as an alternative to Yorktown Units 1 and 2, PJM and Dominion would have to procure enough battery storage to be on par with those units. ¹¹ Insufficient battery storage would lead to the RAS being triggered, automatically shedding 950 MW of load. Suggesting that battery storage is a workable solution, Sierra Club's expert noted three recent examples: (1) a 20 MW, four-hour battery storage system; (2) a pair of four-MWh batteries, and (3) a 100 MW rechargeable storage system. *See* Sierra Club Exhibit F at 18-19. In this case, Dominion would need to procure approximately 270 MW (net) of battery storage to replace the output of Yorktown Units 1 and 2 adequately and reliably. Doing so would come at a high cost to ratepayers without a proven benefit if the full 270 MW is not required during the anticipated emergency timeframe.

Under Sierra Club's first example, Southern California Edison (SCE) recently procured four hours of 20 MW (80MWh) energy storage from Canada's AltaGas Ltd. ¹² The Pomona Energy Storage Facility, built to house the batteries and inverters, was completed in under four months and came online in December 2016. ¹³ The project, with its 80 MWh of discharge capacity, cost between \$40 million and \$45 million. ¹⁴ Scaling those figures up for a rough estimate, a similar storage facility capable of 270 MW (net) output for four hours could cost approximately \$540 million to \$600 million. The cost of Tesla's project in South Australia, noted by Sierra Club as its third example, is estimated to be \$576 to \$730 per kilowatt, ¹⁵ which roughly equates to between \$622 million and \$788

¹⁰ Unlike demand response or behind-the-meter generation, PJM and Dominion could deploy battery storage that could be available without contingencies, and some portion of direct-current battery output could be converted for reactive power support.

¹¹ Although it would be theoretically possible to deploy a combination of the alternative resources proposed by Sierra Club such that the required amount of battery storage could be reduced, it was the Department's judgment that, due to the minimal amount of demand response and behind-the-meter resources available, modeling combination scenarios would not serve to further inform DOE's review.

 $^{^{12}\} https://www.altagas.ca/sites/default/files/2017-02/Pomona\%20 Energy\%20 Storage\%20 brochure.pdf.$

¹³ Id.

¹⁴ Id.; http://www.reuters.com/article/idUSFWN1AX0G9.

https://www.reuters.com/article/us-australia-power-tesla/teslas-big-battery-races-to-keep-south-australias-lights-on-idUSKCN1C40DD. The costs described in Australian dollars (\$750 to \$950) were converted to U.S. dollars in this document using a market-closing exchange rate of 0.7687 U.S. dollars to 1 Australian dollar, as reported by the Wall Street Journal on Monday, October 30, 2017. See http://www.wsj.com/mdc/public/page/2_3021-forex html.

million for the 270 MW, four-hour storage system contemplated earlier. Costs are highly variable and depend on procurement contract negotiations. But they would run into the hundreds of millions of dollars, and ratepayers would absorb a significant portion of those charges. ¹⁶ The examples Sierra Club's expert mentions address different situations, as it appears the battery storage systems were purchased consistent with overall system planning goals, as opposed to the situation here that would add a costly new resource to an existing system as a short-term fix while longer-term solutions were constructed. In short, none of the examples presented is applicable to the reliability situation faced here. While battery storage has improved markedly, it is not a workable solution to the substantial reliability concerns the Department has addressed in this particular geographic area.

Using Yorktown Unit 3 to alleviate the emergency is PJM and Dominion's only remaining option, and its operating constraints prevent it from addressing the emergency. Unit 3 is oil-fired and has a maximum real output of 789 MW, but it is unreliable and can only operate at an 8 percent capacity factor (63 MW) to comply with EPA's Mercury and Air Toxics Standards (MATS). PJM Application (June 13, 2017) at 18; Email from S. Pincus to R. Batra (Oct. 23, 2017); Email from M. Regulinski to R. Batra (Nov. 2, 2017), included in the docket of this Order. Dominion has stated at least five significant reasons for its concerns about Unit 3: structural duct work and damper repairs, turbine inspections and repairs, waterbox repairs, turbine valve work and repairs, and various boiler tube leaks. See id. Apart from power output that is only a fraction of what Units 1 and 2 can produce, Unit 3 is so unreliable that Dominion has only operated it for 54 days in the past three (3) years. See Yorktown Unit 3 Days of Operation 2014-2016, included in the docket of this Order. Unit 3 is not a viable alternative due to limitations that prevent PJM from relying on that unit consistently and for an extended period of time.

Unlike the Sierra Club's proposed alternatives, either individually or in the aggregate, the Yorktown coal units can resolve the reliability emergency. They provide both real power and reactive power support, without contingencies, and at the levels required. Without the Yorktown Units, PJM cannot ensure the reliability of the grid in the North Hampton Roads area throughout the transmission upgrade schedule. For that reason, the authorization of the Yorktown Units to operate for reliability purposes only, despite being less than ideal, remains the *best* available option to meet the identified emergency.

http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/FE377273FDBE2408882580F3007B32BE/\$FILE/A1703 XXX-SCE%20Application%20for%20Cost%20Recovery%20of%20ACES%20UOS.pdf.

¹⁶ For example, although SCE and Tesla did not disclose the contract price for Tesla's storage units at SCE's Mira Loma substation, SCE filed a rate case with the California Public Utilities Commission on March 30, 2017, seeking in part to recover costs of those facilities from its ratepayers. *See* Application of Southern California Edison Company (U 338-E) for Recovery of Aliso Canyon Utility Owned Energy Storage Costs (Mar. 30, 2017),

Sierra Club's reference to the 2005 Mirant 202(c) order, for the proposition that the Department can and should require ordered entities to obtain alternative energy sources during the period of an emergency, is misplaced. Specifically, Sierra Club cites the following discussion in Order No. 202-05-3 (the Mirant Order): "DOE expects that the DCPSC, having sought an emergency order, will take such actions as are within its authority to provide adequate and reliable electric service for the Central D.C. area including, for example, expediting approval of PEPCO transmission system upgrades and instituting demand response programs." Order No. 202-05-3, at 9 (Dec. 20, 2005), https://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/mirant_122005_2.pdf. However, at least two key differences distinguish the September Order from the Mirant Order. First, Dominion already has a demand response program. As explained above, Dominion's demand response program cannot ensure reliability on the North Hampton Roads power grid during a transmission outage. Second, the Mirant Order urged the D.C. Public Service Commission to "take all reasonable actions." Again as explained above, even if each of Sierra Club's alternatives were viewed as reasonable, the alternatives are inadequate to solve the reliability emergency on their own.

A determination not to order Yorktown Units 1 and 2 to operate could result in severe collateral effects—namely, load shedding across the North Hampton Roads area. Power would be shut off to thousands of customers, which could impact over half a million people. Because the RAS is activated when load reaches a critical threshold, whether that threshold is triggered by a transmission outage or by heightened power demand, the full load is shed immediately. That is, the shedding is not piecemeal—950 MW of power immediately go off-line upon activation of the RAS. Without sufficient backup generation, the risk of load shedding pursuant to the RAS is far greater. While the September Order is directed at avoiding the emergency presented by that loss of power, it also takes into account the Department's independent analysis of the reliability situation in the North Hampton Roads area and an evaluation of proposed alternatives. Without an emergency order the region may suffer heavy load shedding, and the Department has determined to protect the public interest by exercising its authority to avoid the loss of power that otherwise would result.

¹⁷ See Summary of Findings at 4 (noting that the North Hampton Roads area population exceeded 660,000 in July 2016, according to U.S. Census estimates).

¹⁸ In light of a permanent solution coming online soon, this analysis did not model all permutations of alternative resources; instead, in the Department's judgment, an examination of whether there were any realistic substitute resources during the anticipated emergency timeframe was conducted.

The Department Complied With Its Environmental Review Obligations

Sierra Club also contends that the Department did not adequately assess the impact of its Order under the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 et seq. NEPA requires federal agencies to consider the potential environmental impacts of their proposed actions before taking action. The regulations of the Council on Environmental Quality (CEQ) implementing NEPA, codified at 40 C.F.R. parts 1500–1508, establish three levels of review for proposed actions subject to NEPA: categorical exclusion (CX) determinations, ¹⁹ environmental assessments (EA), ²⁰ and environmental impact statements (EIS). ²¹ In this instance, Sierra Club highlights the issuance of the September Order as the underlying action subject to NEPA review. The Department acted consistently with NEPA by issuing a CX determination, which is based on its assessment of the proposed action and determination that it fits within a category of actions previously established by the Department and found not to have a significant impact, individually or cumulatively, on the environment. See Record of Categorical Exclusion Determination issued on September 11, 2017.

Specifically, the proposed action fits within the CX for power marketing services and power management activities. That CX covers "[p]ower marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits." See 10 C.F.R. Part 1021, Subpart D, Appendix B, B4.4.²² The September Order requires Dominion to "operate Units 1 and/or 2 of the Yorktown Power Station as directed by PJM only as needed to address reliability issues." September Order at 2. Such operation fits squarely within the power management activities of load shaping and balancing that are included in B4.4.²³ Sierra Club does not dispute that the September Order authorizes covered power management activities. Instead, Sierra Club argues that the authorized operations would not be "within normal operating limits." Petition at 7.

¹⁹ A CX is a category of actions that a federal agency has determined do not individually or cumulatively have a significant impact on the environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required. *See* 40 C.F.R. § 1508.4.

²⁰ An EA is a relatively brief analysis conducted to determine whether a proposed action may have a significant impact on the environment and, thus, whether an EIS is required. *See id.* § 1508.9.

²¹ An EIS is a detailed analysis of the potential environmental impacts of a proposed action (and alternatives) that may have a significant impact on the environment. *See id.* § 1508.11.

²² This CX was revised during a 2011 DOE rulemaking, in part, to make clear that it applies to power management activities, including those evaluated or overseen, even if not directly undertaken, by the Department. *See* 76 Fed. Reg. 214, 227 (Jan. 3, 2011).

²³ "Balancing" was added to "load shaping" in B4.4 during the rulemaking to make clear that the CX is intended to cover load balancing which "helps ensure system reliability by managing energy resources to be equal with load." 76 Fed. Reg. 63,764, 63,777 (Oct. 13, 2011).

Sierra Club's argument rests on its mistaken interpretation that "normal operating limits" refers to compliance with environmental standards, including MATS. *Id.* Rather, "normal operating limits" refers to elements of power generation capacity, not permit or other regulatory limits.

First, the Sierra Club's interpretation fails to account for the words "would remain" that precede "within normal operating limits" in the CX. "Would remain" provides important context, demonstrating that the CX contemplates the proposed operation being evaluated against the current operation to see if the operations will be consistent, *i.e.*, "would remain within normal operating limits." Sierra Club's interpretation would require one to evaluate the proposed operation against other operating units, reading the words "would remain" out of the regulation. As such, Sierra Club's interpretation of the CX is erroneous and conflicts with the regulatory text.

Second, Sierra Club offers no authority in support of its interpretation. As explained below, the CX refers to "normal operating limits," which DOE interprets to refer to elements of power generation capacity, not permit or other regulatory limits, such as Clean Air Act emissions limits as Sierra Club contends. The text of the regulation and industry practice both amply support the Department's interpretation of its own CX. Moreover, the Supreme Court has explained that "[w]hen an agency interprets its own regulation, the Court, as a general rule, defers to it unless that interpretation is plainly erroneous or inconsistent with the regulation." *Decker v. Nw. Envtl. Def. Ctr.*, 568 U.S. 597, 613 (2013) (internal quotation marks omitted) (citing *Chase Bank USA*, *N.A. v. McCoy*, 562 U.S. 195, 208 (2011) (quoting *Auer v. Robbins*, 519 U.S. 452, 461 (1997))).

In its CX determinations for these orders, the Department interpreted the language "would remain within normal operating limits" to mean that operations would remain within normal operational capacities and limits. See CX determinations for the June and September Orders; see also CX Determination for Order No. 202-17-1 (Categorical Exclusion Determination, Grand River Dam Authority). The operational capacities for Units 1 and 2 are reflected in their maximum real outputs of 159 MW and 164 MW

²⁴ The Department's establishment of other CXs related to electrical power and transmission supports its interpretation that normal operating limits relates to operational capacity. For example, for some actions, the Department has established corollary categories of actions that typically require a CX, EA, or EIS. See, e.g., the CX at B4.1, which covers certain electric power acquisitions involving "existing generation resources operating within their normal operating limits." 10 C.F.R. Part 1021, Subpart D, Appendix B. The EA corollary for this CX is C7, which applies, in part, to "changes in the normal operating limits of generation resources equal to or less than 50 average megawatts," and the D7 EIS corollary, which applies to "changes in the normal operating limits of generation resources greater than 50 average megawatts." *Id.* It is clear from the focus on MWs in these provisions that the term "normal operating limits" refers to operational capacity.

respectively, with a net output²⁵ from each unit of 135 MW. See PJM Application (June 13, 2017) at 5; Email from M. Regulinski to R. Batra (Sept. 5, 2017); Email from M. Regulinski to R. Batra (Oct. 27, 2017). The maximum real outputs represent the high end of the operating parameters for these units. The objective is to operate the units consistent with these outputs; such operation is consistent with the prescribed normal operating limits.²⁶ The Department's determination that the units will remain within normal operating limits is supported by the record. As evidenced by the operational data provided to date for operations under the June and September Orders, these units have remained within their maximum real output limits. See Renewal Application, Attachment 1; Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4 (Sept. 28, 2017), Attachments 1, 3, and 5. Pursuant to the September Order, these units will remain within their operational capacities and are expected to operate below their capacity given the restrictions provided in the September Order (i.e., operate as directed by PJM only as needed to address reliability issues and exhaust all reasonably and practically available resources prior to operating). In fact, the units are anticipated to run only 81 days over the 18-20 month construction period, Answer at 10, which is 81 out of 540-600 days or 13-15% of the time.

Third, DOE's interpretation is consistent with the common understanding of the term "operating limits" in the technical community and in the context of the power generation facilities at issue. For example, NERC defines "equipment rating" to mean "[t]he maximum and minimum voltage, current, frequency, real and reactive power flows on individual equipment under steady state, short-circuit and transient conditions, as permitted or assigned by the equipment owner." Glossary of Terms Used in NERC Reliability Standards (updated Oct. 6, 2017), http://www.nerc.com/files/glossary of terms.pdf. NERC defines "normal rating" as "[t]he rating as defined by the equipment owner that specifies the level of electrical loading, usually expressed in megawatts (MW) or other appropriate units that a system, facility, or element can support or withstand through the daily demand cycles without loss of equipment life." *Id*.

In the alternative, even under Sierra Club's proffered interpretation that the phrase "normal operating limits" includes considerations beyond operational capacity, such as Clean Air Act emissions requirements, the September Order and operation of Units 1 and 2 pursuant to that Order would meet the parameters of B4.4. Sierra Club argues that the operation of these units will not be within normal operating limits because such operation would not be in compliance with MATS. See Petition at 7. However, as Sierra Club acknowledges, these units are proposed for deactivation because they are not, and never

²⁵ The net MW output is "the gross output of the units reduced by station auxiliary power, which is the power needed to operate the station itself and the generation units." Email from M. Regulinski to R. Batra (Oct. 27, 2017).

²⁶ While it is possible for a unit to exceed its maximum real outputs, doing so is ill-advised, as it could result in overheating, equipment damage, inefficiencies, and a shortened operational life of the unit.

have been, in compliance with MATS. See id. Accepting arguendo Sierra Club's interpretation that the phrase "normal operating limits" under which Units 1 and 2 "would remain" refers to how the units have operated in relation to MATS compliance, then it follows that "normal operation" of these particular units is non-compliance. In other words, under this reading of the regulation, "normal operating limits" and MATS non-compliance would be co-extensive.

The MATS took effect in April 2012. See 77 Fed. Reg. 9304 (Feb. 16, 2012). Section 112(i)(3)(A) of the Clean Air Act allowed existing power plants three years—i.e., until April 2015—to comply with MATS. See 42 U.S.C. § 7412(i)(3)(A). During these three years, Yorktown Units 1 and 2 were not operating in compliance with MATS. Section 112(i)(3)(B) of the Clean Air Act further allowed for a one-year extension of compliance until April 2016. See id. § 7412(i)(3)(B). Dominion sought and received this compliance extension from the Virginia Department of Environmental Quality (VADEQ). Thereafter, Dominion sought and received an ACO from EPA. See AED-CAA-113(a)-2016-0005. The ACO allowed the Yorktown Units 1 and 2 to operate, under certain conditions, through April 15, 2017. See id. at 8. In the five and a half years since the MATS took effect, the Yorktown units have never been equipped to comply with MATS. Nevertheless, they have operated, and for five of those years, they were operating pursuant to allowances in the Clean Air Act. The Department's Orders allow for continued conditional operation, incorporating conditions contained in EPA's ACO, consistent with how these units have operated (as relates to MATS) for years.

In addition to the applicability of the B4.4 CX, Sierra Club argues that the June Order and the September Order are major federal actions significantly affecting the environment. See Petition at 6. Sierra Club points to the mercury and hydrogen chloride (HCl) per-pound emissions estimates (3.3068 lbs./TBtu and 0.0478 lbs./MMBtu, respectively)²⁷ that were provided by PJM in its Renewal Application and notes that these estimated emissions exceed the MATS for these two pollutants. See id.; Renewal Application, Attachment 2. First, these per pound emissions estimates are based on emissions factors, and the projected monthly emissions provided by PJM are based on conservative operational assumptions and are intended to be bounding. For example, PJM's monthly emissions estimates are based on its expectations that there will be a total of 81 days over load thresholds that will necessitate operation of Units 1 and/or 2. See Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4 (Sept. 28, 2017), Attachment 4. The monthly emissions estimates "are based on full operating days" and conservatively assume an operating day consists of "24 hours of operation, 16 hours at low load and 8 hours at maximum load." Report on Yorktown Units 1 and 2 Operations

²⁷ PJM's per pound emissions estimates for mercury and HCl are based on emissions factors from AP-42, Fifth Edition. See Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-2 (Aug. 24, 2017) at 4. Mercury emissions were based on AP-42, Table 1.1-18 and HCl was based on AP-42, Table 1.1-15. See id.

Pursuant to Order No. 202-17-2 (Aug. 24, 2017) at 4. Second, in order to minimize emissions, the Secretary included conditions in the September Order to minimize the impacts from operation of Yorktown Units 1 and 2. As such, there is no indication that the emissions estimated by PJM will necessarily be reached.

Moreover, DOE consulted with EPA about the September Order, and EPA had the opportunity to suggest additional conditions it determined "necessary to minimize any adverse environmental impacts to the extent practicable." 16 U.S.C. § 824a(c)(4)(B). EPA did not suggest additional conditions or indicate concerns with DOE's approach. *See* Email from L. Starfield to P. Hoffman (Sept. 11, 2017), available at https://energy.gov/oe/downloads/additional-documents-order-no-202-17-4.

Nevertheless, there is a reasonable expectation that some emissions could exceed the MATS. Yorktown Units 1 and 2 are not equipped to be MATS compliant. As all parties have acknowledged, that is the reason Dominion seeks to retire the units and why it sought and was granted compliance extensions from VADEQ and EPA, and in part, why the September Order²⁸ was requested.

After stating the per pound emissions estimates, Sierra Club then cites to PJM's estimates for total emissions of mercury and HCl over the projected 18-20 month period and concludes, without any supporting analysis related to the operation of Units 1 and 2, that "[t]hose emissions will have a significant impact." Petition at 6. DOE assessed the constrained operation allowed under the September Order and determined that the constraints were consistent with those previously imposed by EPA in the ACO, and that such operations would not result in significant impacts. Sierra Club cites to selective parts of EPA's May 2011 proposed rulemaking related to National Emissions Standards for Hazardous Air Pollutants and Standards of Performance which are inapposite to the Order, ²⁹ and states that mercury is hazardous even in small quantities and that HCl can cause acute and chronic health harms. *See id.* Also, as an attachment to its Petition, Sierra Club includes a 2011 EPA memorandum related to a non-Hg case study of chronic

²⁸ "[A]ction taken by a party, that is necessary to comply with an order issued under this subsection" which "results in non-compliance with ... any Federal, State, or local environmental law or regulation ... shall not be considered a violation ... or subject such party to any requirement, civil or criminal liability, or a citizen suit." 16 U.S.C. § 824a(c)(3).

²⁹ For example, Sierra Club notes a dose of .0001mg/kg-day for mercury and states that exposures above that level raise health concerns. *See* Petition at 6. This dose is the "reference dose" (RfD) for methyl mercury, which was described during the rulemaking as "the amount of a chemical which, when ingested daily over a lifetime, is anticipated to be without adverse health effects to humans, including sensitive subpopulations." 76 Fed. Reg. 24,976, 24,982 (May 3, 2011). The rulemaking further described the RfD as "an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure . . . that is likely to be without an appreciable risk of deleterious effects during a lifetime." *Id.* at 25,000. This scenario plainly does not reflect expected exposure based on operations under the September Order. The operations of Units 1 & 2 will be limited to generation needed to meet grid reliability, and will be of a limited 18-20 month duration.

inhalation risks that does not correlate to the emissions or potential exposures related to the September Order. ³⁰ See Petition at 6; EPA Memorandum (Mar. 16, 2011) attached to Petition. Yet, Sierra Club has provided no applicable data or analysis in support of this claim, and therefore has failed to demonstrate significant impacts from the subject Order.

Finally, Sierra Club notes that CEQ has NEPA procedures that are applicable in emergency situations. *See* Petition at 8. The Department agrees that § 1506.11 provides that "[w]here emergency circumstances make it necessary to take an action with significant environmental impact without observing the provisions of these regulations, the federal agency taking the action should consult with the Council about alternative arrangements." As explained above, the Department concluded that issuance of the September Order would not result in significant environmental impacts. Therefore, alternative arrangements and consultation were not required. In this case, the Department has chosen to proceed consistently with one of the established levels of NEPA review: issuance of a CX determination.³¹

Sierra Club concludes by stating that the extended nature of the situation provides time for DOE to conduct additional NEPA review and to inform subsequent renewals. *See* Petition at 9-10. As detailed above, the Department has complied with NEPA by issuing a CX determination. Nevertheless, the Department will evaluate any future renewal applications from PJM and assess the appropriate level of NEPA review based on the facts presented at that time.

Conclusion

When emergency situations arise, it is critical to have the tools to respond to them quickly, efficiently, and effectively. The Department issued the September Order because, in the Secretary's judgment, its provisions would best meet the emergency and serve the public interest in the North Hampton Roads area. The operative interest is in keeping the lights on, allowing the PJM-mandated transmission upgrades to continue, while to the maximum extent practicable remaining consistent with environmental law and minimizing the adverse effects of power generation on human health and the environment. The September Order is tailored to accomplish those goals. Accordingly, Sierra Club's petition for rehearing is denied.

³⁰ Sierra Club cites this inapposite study because it references the Yorktown facility. The study was actually based on 5-year concentrations for pollutants that were calculated based on information from 2005-2009, and the maximum individual risk for each facility was calculated based on "risk associated with a continuous lifetime (24 hours per day, 7 days per week, and 52 weeks per year for a 70-year period) exposure to the maximum concentration." EPA Memorandum at 12.

³¹ Sierra Club incorporates by reference Section IV.C of its original Petition. *See* Petition at 8 n.5. The substantive arguments raised therein have been addressed above.

From:

Konieczny, Katherine

To:

Bittner, Kathy (CONTR); Jereza, Catherine

Cc: Subject: <u>Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew</u> RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Date: Attachments: Monday, November 06, 2017 3:50:55 PM Summary of Findings Order No. 202-18-1.odf

Looks like the right one. Attached as pdf with name omitting the date/time. I also added one email address to the draft notification email below. Kevin Finto is outside counsel to Dominion and he signed Dominion's last filing.

-Kathy K

From: Bittner, Kathy (CONTR)

Sent: Monday, November 06, 2017 3:39 PM

To: Jereza, Catherine

Cc: Konieczny, Katherine; Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Sure, here it is.

From: Jereza, Catherine

Sent: Monday, November 06, 2017 3:36 PM

To: Bittner, Kathy (CONTR) < Kathy.Bittner@hq.doe.gov>

Cc: Konieczny, Katherine < Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher

<<u>Christopher.Drake@hq.doe.gov</u>>; Batra, Rakesh <<u>Rakesh.Batra@Hq.Doe.Gov</u>>; Rosenbaum,

Matthew < Matthew. Rosenbaum@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – do you have the electronic version that includes John Lucas' edits? Can you send so we can make sure the right version goes out.

Once we have that, I'll be sending the email out below.

Thanks!

Katie

From: Jereza, Catherine

To: <u>Steven.Pincus@pjm.com</u>; <u>craig.glazer@pjm.com</u>; <u>michael.regulinski@dominionenergy.com</u>; <u>sanjay.narayan@sierraclub.org</u>; <u>casey.roberts@sierraclub.org</u>; <u>bridget.lee@sierraclub.org</u>;

kfinto@hunton.com

Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine

Subject: DOE Order 202-18-1

Good evening,

Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are

attached. Regards,

Katie

From: Bittner, Kathy (CONTR)

Sent: Monday, November 06, 2017 3:07 PM

To: Jereza, Catherine < Catherine. Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew < Matthew.Rosenbaum@hq.doe.gov > Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

HI Katie and Matt,

Just wanted to make sure that you are aware that the order was signed (see attached).

Let me know if you need anything else.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)

Sent: Friday, November 03, 2017 3:31 PM

To: Jereza, Catherine < Catherine.Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew < Matthew.Rosenbaum@hq.doe.gov > Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

FYI...I took the package to Exec Sec. It has cleared Exec Sec review and is with the Deputy Secretary

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Have a great weekend.

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine

Sent: Friday, November 03, 2017 12:35 PM

To: Bittner, Kathy (CONTR) < Kathy.Bittner@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – I'm in my office now.

Cheers Katie

Summary of Findings Department of Energy Order No. 202-18-1

November 6, 2017

Section 202(c) of the Federal Power Act (FPA) (codified at 16 U.S.C. § 824a(c)), through section 301(b) of the Department of Energy Organization Act (codified at 42 U.S.C. § 7151(b)), authorizes the Secretary of Energy, upon finding "that an emergency exists by reason of a sudden increase in the demand for electric energy, or a shortage of electric energy or of facilities for the generation or transmission of electric energy, or of fuel or water for generating facilities, or other causes," to issue an order "requir[ing] . . . such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary's] judgment will best meet the emergency and serve the public interest." 16 U.S.C. § 824a(c)(1). If the order "may result in a conflict with [an] environmental law or regulation," then the Secretary must "ensure that such order requires generation, delivery, interchange, or transmission of electric energy only during hours necessary to meet the emergency and serve the public interest, and, to the maximum extent practicable, is consistent with any applicable . . . environmental law or regulation and minimizes any adverse environmental impacts." Id. § 824a(c)(2). Orders issued under FPA section 202(c) "that may result in a conflict with [an] environmental law or regulation" expire 90 days after they are issued, but the Secretary "may renew or reissue such order[s] . . . for subsequent periods, not to exceed 90 days for each period, as [the Secretary] determines necessary to meet the emergency and serve the public interest." Id. § 824a(c)(4)(A).

Order No. 202-17-4 (the September Order), issued on September 14, 2017, authorizes the operation of coal-fired Yorktown Power Station Units 1 and 2 pursuant to section 202(c), for reliability purposes only and under strict conditions, through December 13, 2017. On October 6, 2017, Sierra Club moved to intervene and petitioned for rehearing of the September Order pursuant to FPA section 313(a), 16 U.S.C. § 825*l*(a). Sierra Club's Motion Petition for Rehearing, and Motion to Intervene (Oct. 6, 2017) (Petition). On October 20, 2017, the Department of Energy (DOE or Department) received an answer to Sierra Club's petition from the Virginia Electric and Power Company (Dominion) and PJM Interconnection LLC (PJM). On October 23, 2017, PJM responded to a list of questions from the Department's Office of Electricity Delivery and Energy Reliability, and further clarifications from PJM and Dominion are noted below.

¹ Issuance of today's Order falls within the timeframe provided under FPA section 313(a). See 16 U.S.C. § 825/(a) ("Unless the [Secretary] acts upon [an] application for rehearing within thirty days after it is filed, such application may be deemed to have been denied."); 10 C.F.R. § 205.5(a)(1); see also Kan. Cities v. FERC, 723 F.2d 82, 85 n.2 (D.C. Cir. 1983) (affirming the Federal Energy Regulatory Commission (FERC) regulatory interpretation of a section 313(a) deadline extension to fall on a business day).

For the reasons discussed in this Summary of Findings, and as reflected in Order No. 202-18-1, Sierra Club's petition for rehearing is denied.

Sierra Club raises two categories of objections to the Department's compliance with FPA section 202(c):

- (1) The Department's failure to (a) properly consult with EPA under Section 202(c) and to (b) add further measures to reduce the Yorktown Units' hours of operation and emissions; and
- (2) The Department's failure to properly assess the impacts of its action under the National Environmental Policy Act and its reliance on an inapplicable categorical exclusion.

The Department's objective was, and remains, to minimize the use of either unit, in light of environmental considerations, without compromising or jeopardizing the reliability of the power grid in the North Hampton Roads area. To accomplish this, the Department must balance competing challenges to arrive at a solution that "in [the Secretary's] judgment will best meet the emergency and serve the public interest." 16 U.S.C. § 824a(c)(1).

The Department Complied with Section 202(c) of the Federal Power Act

A key component of the Sierra Club's first objection is its claim that DOE did not fulfill the statute's consultation requirement. The Sierra Club, however, misreads section 202(c), arguing for a scope and procedural complexity of consultation that is not found in the statute. In renewing or reissuing certain orders under section 202(c), the statute requires DOE to "consult with the primary Federal agency with expertise in the environmental interest protected by [a conflicting] law or regulation" and to "include in any such renewed or reissued order such conditions as such Federal agency determines necessary to minimize any adverse environmental impacts to the extent practicable." 16 U.S.C. § 824a(c)(4)(B).

In this case, DOE consulted with the relevant federal agency, the U.S. Environmental Protection Agency (EPA). Following consultation, EPA concurred in writing with the Department's approach in the September Order. EPA did not recommend or propose further conditions on matters within its purview in the September Order or indicate that additional or different consultation with EPA was desired. The FPA does not specify procedures or substantive requirements for consultation under this provision. Rather, it requires only that a consultation take place and, if the consulted agency (here, EPA) proposes additional conditions in a renewal order, that such conditions be included in the order unless DOE "determines that such condition would prevent the order from adequately addressing the emergency" and publicly explains its determination. Here, EPA recommended no additional conditions. Rather, EPA expressly acknowledged the

September Order's consistency with EPA's April 2016 Administrative Compliance Order (ACO) and expressed no concerns about DOE's approach.

Indeed, the statute expressly recognizes that, as occurred here, the consulted agency might not propose further conditions: "[t]he conditions, if any, submitted by such Federal agency shall be made available to the public." Id. (emphasis added). Thus, Sierra Club incorrectly reads the statute as requiring the consulted agency (i.e., EPA) to verify, independently, DOE's compliance with FPA section 202(c)(2). The statute contains no such requirement or mechanism for such independent verification. Rather, FPA section 202(c)(4) provides the consulted agency the opportunity to propose conditions in a DOE order that would either supplement or substitute for conditions to be ordered by DOE and as to which DOE has discretion to accept or reject, subject to the requirement to explain its reasoning. Sierra Club incorrectly seeks to transform this consultation process from one in which an agency with specific environmental expertise advises DOE on conditions to one in which the consulted agency exercises an oversight role and must approve DOE's actions. However, Sierra Club offers no support for that interpretation, and DOE finds nothing in the text of the statute to support such an interpretation. DOE's consultation with EPA prior to issuing the September Order satisfied the statutory requirements.²

Next, Sierra Club suggests that alternative sources of power can and should replace Yorktown Units 1 and 2 generation during transmission outages or high load conditions, either of which could trigger the Remedial Action Scheme (RAS) that automatically sheds roughly 950 MW of load to prevent voltage collapse. See Summary of Findings for Department of Energy Order No. 202-17-4, at 4 (Sept. 14, 2017) (Summary of Findings). Notably, the Sierra Club acknowledges that the challenged September Order requires PJM and Dominion to exhaust available resources, including demand response and behind-themeter generation resources, prior to operating Yorktown Units 1 or 2. Petition at 9-10. This reduces Sierra Club's objection to the fact that the September Order does not require the consideration of additional resources that may become available "over the course of the emergency." Id. at 10. In other words, Sierra Club concedes that the Department correctly evaluated available alternatives but quibbles that the Department should have analyzed speculative new resources as well.

While the Department does not oppose the use of alternative power sources generally, it explained in the September Order that, in its judgment and based on the record before it, the available alternative power cannot fully compensate for the loss of Yorktown Units 1 and 2 generation, and would therefore not suffice to preserve the reliability of the North Hampton Roads grid:

² Informal communications with EPA staff have continued. Despite learning of the Sierra Club's arguments in the October 6 petition, EPA personnel have not expressed an intent to add conditions.

The only sufficient alternative to the RAS and its resulting outages for up to approximately 150,000 customers is the emergency operation of Yorktown Units 1 and 2. The demand response available to PJM is a small fraction of the load threshold and is "not sufficient to ensure reliable service." Likewise, Dominion has limited demand-side management and curtailment capabilities, insufficient for reliability purposes even when fully deployed.

Id. at 6 (citations omitted).

Both the Department's June 2017 and September 2017 orders specifically require the minimum use of Yorktown Units 1 and 2 that preserves system reliability—and, in fact, PJM and Dominion emphasize that "[h]istory and future projections show that the need [for operation of Yorktown Units 1 and 2] is far less than full time and, in total, may only amount to 81 days over the entire 18-20 month [transmission upgrade] period." Motion for Leave to Answer and Answer of Virginia Electric & Power Company and PJM Interconnection LLC, at 10 (Oct. 20, 2017) (Answer). Under section 202(c), the Department is authorized "to require by order such temporary connections of facilities and such generation, delivery, interchange, or transmission of electric energy as in [the Secretary's] judgment will best meet the emergency and serve the public interest." The requirement is conjunctive, not disjunctive. The Department acknowledges that minimizing the use of Yorktown Units 1 and 2, both of which were planned to be retired by now, is in the public interest, along with exploring alternative power sources. In the Secretary's judgment, however, reliance on alternative power sources alone, such as those Sierra Club suggests, does not best meet the emergency. The public interest is not served by the RAS being needlessly activated and power being shut off to 150,000 customersand hundreds of thousands of people—which would be the result of insufficient generation during a transmission outage.

In assessing the need for an emergency order under section 202(c), the Department independently evaluates the situation, but it is not required to determine every reasonable alternative. The statute requires only that the Secretary use his or her best judgment to meet the emergency and serve the public interest. That judgment includes the determination of which factors play a central role in a given emergency and the weight to assign each such factor. In this situation, the expertise of the applicant was an important factor. The Department received an application from PJM, which is not only the regional transmission organization responsible for managing a transmission system across twelve states and the District of Columbia, but also holds the highest-level, federally-regulated reliability responsibilities for the system it manages. Summary of Findings at 2. The Department's independent analysis of PJM's request took into account the extensive earlier reviews conducted by PJM in evaluating the proposed solution. *Id.* at 2-3. Although DOE is not obligated to analyze the viability of alternative resources (especially at the unit level, which is an unbounded analysis if DOE were to consider potential new resources), the

following analysis broadly explains the rationale behind dispatching Yorktown Units 1 and 2 instead of other categories of alternative resources.

The alternatives Sierra Club presents for consideration (namely expanded demand response and distributed generation resources as well as battery storage) do not best meet the emergency because, unlike Yorktown Units 1 and 2, they cannot guarantee enough dispatchable power, both real³ and reactive,⁴ during excessive load periods or transmission outages. Reliance on alternatives to Yorktown Units 1 and 2 would require both real and reactive power supply, and achieving that over the anticipated remaining emergency timeframe⁵ is infeasible due to a combination of technical and market challenges. The precise amount of dispatchable power needed to replace Yorktown Units 1 and 2 varies based on a combination of the system configuration (e.g., whether any other facilities are offline) and load. The Department's analysis reasonably focused on the worst-case scenario, which would draw on the full output of both Units 1 and 2, or 270 MW (net), and also have the option of providing reactive power support. The combined capacity of all currently-available alternatives does not reach 270 MW (net), and the Department explains below why those alternative resources, even if combined, are unlikely to become sufficient substitutes over the remaining emergency timeframe.

First, relying on available demand response is inadequate because it cannot provide sufficient reactive power support. Demand response is only a load reduction measure. Both real power and reactive power are critical to maintaining system reliability, and while demand response decreases both real power demand and reactive power demand, it does not generate power. The available demand response resources are few in number, and there is no indication in the record that market incentives could substantially and rapidly increase demand response over the anticipated emergency timeframe. PJM reports that it

³ The North American Electric Reliability Corporation (NERC) Glossary, as adopted by the NERC Board of Trustees, defines "real power" as "[t]he portion of electricity that supplies energy to the Load" — that is, to customers. Glossary of Terms Used in NERC Reliability Standards (updated Oct. 6, 2017), http://www.nerc.com/files/glossary of terms.pdf.

⁴ The NERC Glossary defines "reactive power" as "[t]he portion of electricity that establishes and sustains the electric and magnetic fields of alternating-current equipment. Reactive Power must be supplied to most types of magnetic equipment, such as motors and transformers. It also must supply the reactive losses on transmission facilities. Reactive Power is provided by generators, synchronous condensers, or electrostatic equipment such as capacitors and directly influences electric system voltage. It is usually expressed in kilovars (kvar) or megavars (Mvar)." *Id.*

⁵ This analysis applies to both the 90-day term of Order No. 202-17-4 and the estimated remaining time for the Skiffes Creek Transmission Project. The latter is expected to take 18-20 months. Four months have passed since construction commenced.

⁶ When load is reduced, the requisite reactive power required by the system is proportionally reduced. DOE does not treat that as reactive power support akin to the ancillary services provided by Yorktown Units 1 and 2, however, because demand response merely removes the need for some reactive power support rather than actively providing it.

has approximately 26 MW of demand response available during the 2017/2018 Planning Year, but just 0.7 MW of demand response resources are available year-round. Email from S. Pincus to R. Batra (Oct. 23, 2017), included in the docket of this Order. Additionally, Dominion reports that it has roughly 20 MW of Demand Side Management capability—specifically, remote air conditioning control, limited to a total of 120 hours and 30 days during the summer months. *Id.* Dominion also can curtail a large industrial customer by an average of 75 MW for transmission emergencies, but this curtailment is available only when the customer's load is about 99 MW, so that the reduced customer load is not more than 24 MW. *Id.* Even during the summer of 2017, the customer's load averaged 40 MW, well below the threshold for load curtailment. *Id.* Demand response is a voluntary program that even participating customers can decline to follow (at risk of contractual penalties). As such, PJM or Dominion cannot guarantee load reduction from demand response. Even if demand response were compulsory, it cannot provide reactive power benefits equivalent to generation units. For all of these reasons, reliance on demand response is not a workable solution to the reliability concerns at issue.

Second, distributed energy resources, such as rooftop solar and other behind-themeter generation, also are insufficient to address the reliability concerns. Like demand response, behind-the-meter generation reduces the load a utility serves. But unlike demand response, distributed energy resources have the potential of adding supply to the system. This benefit is reduced, however, by two issues: (1) distributed energy resources are not assured because their availability depends on variable factors, such as solar radiation; and (2) reactive power support from distributed energy resources cannot be aggregated in a linear fashion, making its benefits too geographically constrained to be useful across the same area served by Yorktown Units 1 and 2. Distributed energy resources or behind-themeter programs are also voluntary. Hence, customers cannot be compelled to install or use behind-the-meter generation. Current available resources are insufficient, and fundamental questions about how to fairly compensate owners likely preclude substantial shifts in this resource over the anticipated emergency timeframe. Thus, relying on

⁷ The annual availability schedule is as follows: 0.7 MW from January through April, 11 MW in May, 25.5 MW from June through September, 11 MW in October, and 0.7 MW from November to December.

⁸ PJM's forecast for distributed solar generation across the entire Dominion zone—not the smaller North Hampton Roads area—is 130MW (real power) at typical peaking conditions. Email from S. Pincus to R. Batra (Oct. 23, 2017). In weather patterns unfavorable to solar power generation, that number could drop to zero.

⁹ Earlier this year, FERC outlined the challenges in pricing sales of distributed energy back to the grid. See Policy Statement, Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery, 158 FERC ¶ 61,051 (Jan. 19, 2017). An "electric storage resource" is "a resource capable of receiving electric energy from the grid and storing it for later injection of electricity back to the grid." Indianapolis Power & Light Co. v. Midcontinent Indep. Sys. Operator, Inc., 158 FERC ¶ 61,107 at P 6 n.14 (Feb. 1, 2017). That definition "include[s] all types of electric storage technologies, regardless of their size, storage medium (e.g., batteries, flywheels, pumped-hydro), or whether located on the interstate grid or on a distribution system." Id.

variable or intermittent resources for reactive power is not a solution to reliability concerns.

Finally, rechargeable battery storage, even if technically feasible, ¹⁰ is not a viable solution because it would require a substantial financial outlay for long-life equipment to address a short-term problem that could be resolved in as little as 14 months when the Skiffes Creek Transmission Project comes online. To serve as an alternative to Yorktown Units 1 and 2, PJM and Dominion would have to procure enough battery storage to be on par with those units. ¹¹ Insufficient battery storage would lead to the RAS being triggered, automatically shedding 950 MW of load. Suggesting that battery storage is a workable solution, Sierra Club's expert noted three recent examples: (1) a 20 MW, four-hour battery storage system; (2) a pair of four-MWh batteries, and (3) a 100 MW rechargeable storage system. *See* Sierra Club Exhibit F at 18-19. In this case, Dominion would need to procure approximately 270 MW (net) of battery storage to replace the output of Yorktown Units 1 and 2 adequately and reliably. Doing so would come at a high cost to ratepayers without a proven benefit if the full 270 MW is not required during the anticipated emergency timeframe.

Under Sierra Club's first example, Southern California Edison (SCE) recently procured four hours of 20 MW (80MWh) energy storage from Canada's AltaGas Ltd. ¹² The Pomona Energy Storage Facility, built to house the batteries and inverters, was completed in under four months and came online in December 2016. ¹³ The project, with its 80 MWh of discharge capacity, cost between \$40 million and \$45 million. ¹⁴ Scaling those figures up for a rough estimate, a similar storage facility capable of 270 MW (net) output for four hours could cost approximately \$540 million to \$600 million. The cost of Tesla's project in South Australia, noted by Sierra Club as its third example, is estimated to be \$576 to \$730 per kilowatt, ¹⁵ which roughly equates to between \$622 million and \$788

¹⁰ Unlike demand response or behind-the-meter generation, PJM and Dominion could deploy battery storage that could be available without contingencies, and some portion of direct-current battery output could be converted for reactive power support.

¹¹ Although it would be theoretically possible to deploy a combination of the alternative resources proposed by Sierra Club such that the required amount of battery storage could be reduced, it was the Department's judgment that, due to the minimal amount of demand response and behind-the-meter resources available, modeling combination scenarios would not serve to further inform DOE's review.

¹² https://www.altagas.ca/sites/default/files/2017-02/Pomona%20Energy%20Storage%20brochure.pdf.

¹³ Id

¹⁴ Id.; http://www.reuters.com/article/idUSFWN1AX0G9.

¹⁵ https://www reuters.com/article/us-australia-power-tesla/teslas-big-battery-races-to-keep-south-australias-lights-on-idUSKCN1C40DD. The costs described in Australian dollars (\$750 to \$950) were converted to U.S. dollars in this document using a market-closing exchange rate of 0.7687 U.S. dollars to 1 Australian dollar, as reported by the Wall Street Journal on Monday, October 30, 2017. *See* http://www.wsj.com/mdc/public/page/2_3021-forex html.

million for the 270 MW, four-hour storage system contemplated earlier. Costs are highly variable and depend on procurement contract negotiations. But they would run into the hundreds of millions of dollars, and ratepayers would absorb a significant portion of those charges. The examples Sierra Club's expert mentions address different situations, as it appears the battery storage systems were purchased consistent with overall system planning goals, as opposed to the situation here that would add a costly new resource to an existing system as a short-term fix while longer-term solutions were constructed. In short, none of the examples presented is applicable to the reliability situation faced here. While battery storage has improved markedly, it is not a workable solution to the substantial reliability concerns the Department has addressed in this particular geographic area.

Using Yorktown Unit 3 to alleviate the emergency is PJM and Dominion's only remaining option, and its operating constraints prevent it from addressing the emergency. Unit 3 is oil-fired and has a maximum real output of 789 MW, but it is unreliable and can only operate at an 8 percent capacity factor (63 MW) to comply with EPA's Mercury and Air Toxics Standards (MATS). PJM Application (June 13, 2017) at 18; Email from S. Pincus to R. Batra (Oct. 23, 2017); Email from M. Regulinski to R. Batra (Nov. 2, 2017), included in the docket of this Order. Dominion has stated at least five significant reasons for its concerns about Unit 3: structural duct work and damper repairs, turbine inspections and repairs, waterbox repairs, turbine valve work and repairs, and various boiler tube leaks. See id. Apart from power output that is only a fraction of what Units 1 and 2 can produce, Unit 3 is so unreliable that Dominion has only operated it for 54 days in the past three (3) years. See Yorktown Unit 3 Days of Operation 2014-2016, included in the docket of this Order. Unit 3 is not a viable alternative due to limitations that prevent PJM from relying on that unit consistently and for an extended period of time.

Unlike the Sierra Club's proposed alternatives, either individually or in the aggregate, the Yorktown coal units can resolve the reliability emergency. They provide both real power and reactive power support, without contingencies, and at the levels required. Without the Yorktown Units, PJM cannot ensure the reliability of the grid in the North Hampton Roads area throughout the transmission upgrade schedule. For that reason, the authorization of the Yorktown Units to operate for reliability purposes only, despite being less than ideal, remains the *best* available option to meet the identified emergency.

¹⁶ For example, although SCE and Tesla did not disclose the contract price for Tesla's storage units at SCE's Mira Loma substation, SCE filed a rate case with the California Public Utilities Commission on March 30, 2017, seeking in part to recover costs of those facilities from its ratepayers. *See* Application of Southern California Edison Company (U 338-E) for Recovery of Aliso Canyon Utility Owned Energy Storage Costs (Mar. 30, 2017),

http://www3.sce.com/sscc/law/dis/dbattach5e.nsf/0/FE377273FDBE2408882580F3007B32BE/\$FILE/A1703 XXX-SCE%20Application%20for%20Cost%20Recovery%20of%20ACES%20UOS.pdf.

Sierra Club's reference to the 2005 Mirant 202(c) order, for the proposition that the Department can and should require ordered entities to obtain alternative energy sources during the period of an emergency, is misplaced. Specifically, Sierra Club cites the following discussion in Order No. 202-05-3 (the Mirant Order): "DOE expects that the DCPSC, having sought an emergency order, will take such actions as are within its authority to provide adequate and reliable electric service for the Central D.C. area including, for example, expediting approval of PEPCO transmission system upgrades and instituting demand response programs." Order No. 202-05-3, at 9 (Dec. 20, 2005), https://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/mirant 122005 2.pdf. However, at least two key differences distinguish the September Order from the Mirant Order. First, Dominion already has a demand response program. As explained above, Dominion's demand response program cannot ensure reliability on the North Hampton Roads power grid during a transmission outage. Second, the Mirant Order urged the D.C. Public Service Commission to "take all reasonable actions." Again as explained above, even if each of Sierra Club's alternatives were viewed as reasonable, the alternatives are inadequate to solve the reliability emergency on their own.

A determination not to order Yorktown Units 1 and 2 to operate could result in severe collateral effects—namely, load shedding across the North Hampton Roads area. Power would be shut off to thousands of customers, which could impact over half a million people. Because the RAS is activated when load reaches a critical threshold, whether that threshold is triggered by a transmission outage or by heightened power demand, the full load is shed immediately. That is, the shedding is not piecemeal—950 MW of power immediately go off-line upon activation of the RAS. Without sufficient backup generation, the risk of load shedding pursuant to the RAS is far greater. While the September Order is directed at avoiding the emergency presented by that loss of power, it also takes into account the Department's independent analysis of the reliability situation in the North Hampton Roads area and an evaluation of proposed alternatives. Without an emergency order the region may suffer heavy load shedding, and the Department has determined to protect the public interest by exercising its authority to avoid the loss of power that otherwise would result.

¹⁷ See Summary of Findings at 4 (noting that the North Hampton Roads area population exceeded 660,000 in July 2016, according to U.S. Census estimates).

¹⁸ In light of a permanent solution coming online soon, this analysis did not model all permutations of alternative resources; instead, in the Department's judgment, an examination of whether there were any realistic substitute resources during the anticipated emergency timeframe was conducted.

The Department Complied With Its Environmental Review Obligations

Sierra Club also contends that the Department did not adequately assess the impact of its Order under the National Environmental Policy Act (NEPA), 42 U.S.C. 4321 *et seq*. NEPA requires federal agencies to consider the potential environmental impacts of their proposed actions before taking action. The regulations of the Council on Environmental Quality (CEQ) implementing NEPA, codified at 40 C.F.R. parts 1500–1508, establish three levels of review for proposed actions subject to NEPA: categorical exclusion (CX) determinations, ¹⁹ environmental assessments (EA), ²⁰ and environmental impact statements (EIS). ²¹ In this instance, Sierra Club highlights the issuance of the September Order as the underlying action subject to NEPA review. The Department acted consistently with NEPA by issuing a CX determination, which is based on its assessment of the proposed action and determination that it fits within a category of actions previously established by the Department and found not to have a significant impact, individually or cumulatively, on the environment. *See* Record of Categorical Exclusion Determination issued on September 11, 2017.

Specifically, the proposed action fits within the CX for power marketing services and power management activities. That CX covers "[p]ower marketing services and power management activities (including, but not limited to, storage, load shaping and balancing, seasonal exchanges, and other similar activities), provided that the operations of generating projects would remain within normal operating limits." *See* 10 C.F.R. Part 1021, Subpart D, Appendix B, B4.4.²² The September Order requires Dominion to "operate Units 1 and/or 2 of the Yorktown Power Station as directed by PJM only as needed to address reliability issues." September Order at 2. Such operation fits squarely within the power management activities of load shaping and balancing that are included in B4.4.²³ Sierra Club does not dispute that the September Order authorizes covered power management activities. Instead, Sierra Club argues that the authorized operations would not be "within normal operating limits." Petition at 7.

¹⁹ A CX is a category of actions that a federal agency has determined do not individually or cumulatively have a significant impact on the environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required. *See* 40 C.F.R. § 1508.4.

²⁰ An EA is a relatively brief analysis conducted to determine whether a proposed action may have a significant impact on the environment and, thus, whether an EIS is required. *See id.* § 1508.9.

²¹ An EIS is a detailed analysis of the potential environmental impacts of a proposed action (and alternatives) that may have a significant impact on the environment. See id. § 1508.11.

²² This CX was revised during a 2011 DOE rulemaking, in part, to make clear that it applies to power management activities, including those evaluated or overseen, even if not directly undertaken, by the Department. See 76 Fed. Reg. 214, 227 (Jan. 3, 2011).

²³ "Balancing" was added to "load shaping" in B4.4 during the rulemaking to make clear that the CX is intended to cover load balancing which "helps ensure system reliability by managing energy resources to be equal with load." 76 Fed. Reg. 63,764, 63,777 (Oct. 13, 2011).

Sierra Club's argument rests on its mistaken interpretation that "normal operating limits" refers to compliance with environmental standards, including MATS. *Id.* Rather, "normal operating limits" refers to elements of power generation capacity, not permit or other regulatory limits.

First, the Sierra Club's interpretation fails to account for the words "would remain" that precede "within normal operating limits" in the CX. "Would remain" provides important context, demonstrating that the CX contemplates the proposed operation being evaluated against the current operation to see if the operations will be consistent, *i.e.*, "would remain within normal operating limits." Sierra Club's interpretation would require one to evaluate the proposed operation against other operating units, reading the words "would remain" out of the regulation. As such, Sierra Club's interpretation of the CX is erroneous and conflicts with the regulatory text.

Second, Sierra Club offers no authority in support of its interpretation. As explained below, the CX refers to "normal operating limits," which DOE interprets to refer to elements of power generation capacity, not permit or other regulatory limits, such as Clean Air Act emissions limits as Sierra Club contends. The text of the regulation and industry practice both amply support the Department's interpretation of its own CX. Moreover, the Supreme Court has explained that "[w]hen an agency interprets its own regulation, the Court, as a general rule, defers to it unless that interpretation is plainly erroneous or inconsistent with the regulation." *Decker v. Nw. Envtl. Def. Ctr.*, 568 U.S. 597, 613 (2013) (internal quotation marks omitted) (citing *Chase Bank USA, N.A. v. McCoy*, 562 U.S. 195, 208 (2011) (quoting *Auer v. Robbins*, 519 U.S. 452, 461 (1997))).

In its CX determinations for these orders, the Department interpreted the language "would remain within normal operating limits" to mean that operations would remain within normal operational capacities and limits. See CX determinations for the June and September Orders; see also CX Determination for Order No. 202-17-1 (Categorical Exclusion Determination, Grand River Dam Authority). The operational capacities for Units 1 and 2 are reflected in their maximum real outputs of 159 MW and 164 MW

²⁴ The Department's establishment of other CXs related to electrical power and transmission supports its interpretation that normal operating limits relates to operational capacity. For example, for some actions, the Department has established corollary categories of actions that typically require a CX, EA, or EIS. See, e.g., the CX at B4.1, which covers certain electric power acquisitions involving "existing generation resources operating within their normal operating limits." 10 C.F.R. Part 1021, Subpart D, Appendix B. The EA corollary for this CX is C7, which applies, in part, to "changes in the normal operating limits of generation resources equal to or less than 50 average megawatts," and the D7 EIS corollary, which applies to "changes in the normal operating limits of generation resources greater than 50 average megawatts." *Id.* It is clear from the focus on MWs in these provisions that the term "normal operating limits" refers to operational capacity.

respectively, with a net output²⁵ from each unit of 135 MW. See PJM Application (June 13, 2017) at 5; Email from M. Regulinski to R. Batra (Sept. 5, 2017); Email from M. Regulinski to R. Batra (Oct. 27, 2017). The maximum real outputs represent the high end of the operating parameters for these units. The objective is to operate the units consistent with these outputs; such operation is consistent with the prescribed normal operating limits. 26 The Department's determination that the units will remain within normal operating limits is supported by the record. As evidenced by the operational data provided to date for operations under the June and September Orders, these units have remained within their maximum real output limits. See Renewal Application, Attachment 1; Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4 (Sept. 28, 2017), Attachments 1, 3, and 5. Pursuant to the September Order, these units will remain within their operational capacities and are expected to operate below their capacity given the restrictions provided in the September Order (i.e., operate as directed by PJM only as needed to address reliability issues and exhaust all reasonably and practically available resources prior to operating). In fact, the units are anticipated to run only 81 days over the 18-20 month construction period, Answer at 10, which is 81 out of 540-600 days or 13-15% of the time.

Third, DOE's interpretation is consistent with the common understanding of the term "operating limits" in the technical community and in the context of the power generation facilities at issue. For example, NERC defines "equipment rating" to mean "[t]he maximum and minimum voltage, current, frequency, real and reactive power flows on individual equipment under steady state, short-circuit and transient conditions, as permitted or assigned by the equipment owner." Glossary of Terms Used in NERC Reliability Standards (updated Oct. 6, 2017), http://www.nerc.com/files/glossary of terms.pdf. NERC defines "normal rating" as "[t]he rating as defined by the equipment owner that specifies the level of electrical loading, usually expressed in megawatts (MW) or other appropriate units that a system, facility, or element can support or withstand through the daily demand cycles without loss of equipment life." *Id*.

In the alternative, even under Sierra Club's proffered interpretation that the phrase "normal operating limits" includes considerations beyond operational capacity, such as Clean Air Act emissions requirements, the September Order and operation of Units 1 and 2 pursuant to that Order would meet the parameters of B4.4. Sierra Club argues that the operation of these units will not be within normal operating limits because such operation would not be in compliance with MATS. See Petition at 7. However, as Sierra Club acknowledges, these units are proposed for deactivation because they are not, and never

²⁵ The net MW output is "the gross output of the units reduced by station auxiliary power, which is the power needed to operate the station itself and the generation units." Email from M. Regulinski to R. Batra (Oct. 27, 2017).

²⁶ While it is possible for a unit to exceed its maximum real outputs, doing so is ill-advised, as it could result in overheating, equipment damage, inefficiencies, and a shortened operational life of the unit.

have been, in compliance with MATS. See id. Accepting arguendo Sierra Club's interpretation that the phrase "normal operating limits" under which Units 1 and 2 "would remain" refers to how the units have operated in relation to MATS compliance, then it follows that "normal operation" of these particular units is non-compliance. In other words, under this reading of the regulation, "normal operating limits" and MATS non-compliance would be co-extensive.

The MATS took effect in April 2012. See 77 Fed. Reg. 9304 (Feb. 16, 2012). Section 112(i)(3)(A) of the Clean Air Act allowed existing power plants three years—i.e., until April 2015—to comply with MATS. See 42 U.S.C. § 7412(i)(3)(A). During these three years, Yorktown Units 1 and 2 were not operating in compliance with MATS. Section 112(i)(3)(B) of the Clean Air Act further allowed for a one-year extension of compliance until April 2016. See id. § 7412(i)(3)(B). Dominion sought and received this compliance extension from the Virginia Department of Environmental Quality (VADEQ). Thereafter, Dominion sought and received an ACO from EPA. See AED-CAA-113(a)-2016-0005. The ACO allowed the Yorktown Units 1 and 2 to operate, under certain conditions, through April 15, 2017. See id. at 8. In the five and a half years since the MATS took effect, the Yorktown units have never been equipped to comply with MATS. Nevertheless, they have operated, and for five of those years, they were operating pursuant to allowances in the Clean Air Act. The Department's Orders allow for continued conditional operation, incorporating conditions contained in EPA's ACO, consistent with how these units have operated (as relates to MATS) for years.

In addition to the applicability of the B4.4 CX, Sierra Club argues that the June Order and the September Order are major federal actions significantly affecting the environment. See Petition at 6. Sierra Club points to the mercury and hydrogen chloride (HCl) per-pound emissions estimates (3.3068 lbs./TBtu and 0.0478 lbs./MMBtu, respectively)²⁷ that were provided by PJM in its Renewal Application and notes that these estimated emissions exceed the MATS for these two pollutants. See id.; Renewal Application, Attachment 2. First, these per pound emissions estimates are based on emissions factors, and the projected monthly emissions provided by PJM are based on conservative operational assumptions and are intended to be bounding. For example, PJM's monthly emissions estimates are based on its expectations that there will be a total of 81 days over load thresholds that will necessitate operation of Units 1 and/or 2. See Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4 (Sept. 28, 2017), Attachment 4. The monthly emissions estimates "are based on full operating days" and conservatively assume an operating day consists of "24 hours of operation, 16 hours at low load and 8 hours at maximum load." Report on Yorktown Units 1 and 2 Operations

²⁷ PJM's per pound emissions estimates for mercury and HCl are based on emissions factors from AP-42, Fifth Edition. See Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-2 (Aug. 24, 2017) at 4. Mercury emissions were based on AP-42, Table 1.1-18 and HCl was based on AP-42, Table 1.1-15. See id.

Pursuant to Order No. 202-17-2 (Aug. 24, 2017) at 4. Second, in order to minimize emissions, the Secretary included conditions in the September Order to minimize the impacts from operation of Yorktown Units 1 and 2. As such, there is no indication that the emissions estimated by PJM will necessarily be reached.

Moreover, DOE consulted with EPA about the September Order, and EPA had the opportunity to suggest additional conditions it determined "necessary to minimize any adverse environmental impacts to the extent practicable." 16 U.S.C. § 824a(c)(4)(B). EPA did not suggest additional conditions or indicate concerns with DOE's approach. *See* Email from L. Starfield to P. Hoffman (Sept. 11, 2017), available at https://energy.gov/oe/downloads/additional-documents-order-no-202-17-4.

Nevertheless, there is a reasonable expectation that some emissions could exceed the MATS. Yorktown Units 1 and 2 are not equipped to be MATS compliant. As all parties have acknowledged, that is the reason Dominion seeks to retire the units and why it sought and was granted compliance extensions from VADEQ and EPA, and in part, why the September Order²⁸ was requested.

After stating the per pound emissions estimates, Sierra Club then cites to PJM's estimates for total emissions of mercury and HCl over the projected 18-20 month period and concludes, without any supporting analysis related to the operation of Units 1 and 2, that "[t]hose emissions will have a significant impact." Petition at 6. DOE assessed the constrained operation allowed under the September Order and determined that the constraints were consistent with those previously imposed by EPA in the ACO, and that such operations would not result in significant impacts. Sierra Club cites to selective parts of EPA's May 2011 proposed rulemaking related to National Emissions Standards for Hazardous Air Pollutants and Standards of Performance which are inapposite to the Order, ²⁹ and states that mercury is hazardous even in small quantities and that HCl can cause acute and chronic health harms. *See id.* Also, as an attachment to its Petition, Sierra Club includes a 2011 EPA memorandum related to a non-Hg case study of chronic

²⁸ "[A]ction taken by a party, that is necessary to comply with an order issued under this subsection" which "results in non-compliance with ... any Federal, State, or local environmental law or regulation ... shall not be considered a violation ... or subject such party to any requirement, civil or criminal liability, or a citizen suit." 16 U.S.C. § 824a(c)(3).

²⁹ For example, Sierra Club notes a dose of .0001mg/kg-day for mercury and states that exposures above that level raise health concerns. *See* Petition at 6. This dose is the "reference dose" (RfD) for methyl mercury, which was described during the rulemaking as "the amount of a chemical which, when ingested daily over a lifetime, is anticipated to be without adverse health effects to humans, including sensitive subpopulations." 76 Fed. Reg. 24,976, 24,982 (May 3, 2011). The rulemaking further described the RfD as "an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure . . . that is likely to be without an appreciable risk of deleterious effects during a lifetime." *Id.* at 25,000. This scenario plainly does not reflect expected exposure based on operations under the September Order. The operations of Units 1 & 2 will be limited to generation needed to meet grid reliability, and will be of a limited 18-20 month duration.

inhalation risks that does not correlate to the emissions or potential exposures related to the September Order.³⁰ See Petition at 6; EPA Memorandum (Mar. 16, 2011) attached to Petition. Yet, Sierra Club has provided no applicable data or analysis in support of this claim, and therefore has failed to demonstrate significant impacts from the subject Order.

Finally, Sierra Club notes that CEQ has NEPA procedures that are applicable in emergency situations. *See* Petition at 8. The Department agrees that § 1506.11 provides that "[w]here emergency circumstances make it necessary to take an action with significant environmental impact without observing the provisions of these regulations, the federal agency taking the action should consult with the Council about alternative arrangements." As explained above, the Department concluded that issuance of the September Order would not result in significant environmental impacts. Therefore, alternative arrangements and consultation were not required. In this case, the Department has chosen to proceed consistently with one of the established levels of NEPA review: issuance of a CX determination.³¹

Sierra Club concludes by stating that the extended nature of the situation provides time for DOE to conduct additional NEPA review and to inform subsequent renewals. See Petition at 9-10. As detailed above, the Department has complied with NEPA by issuing a CX determination. Nevertheless, the Department will evaluate any future renewal applications from PJM and assess the appropriate level of NEPA review based on the facts presented at that time.

Conclusion

When emergency situations arise, it is critical to have the tools to respond to them quickly, efficiently, and effectively. The Department issued the September Order because, in the Secretary's judgment, its provisions would best meet the emergency and serve the public interest in the North Hampton Roads area. The operative interest is in keeping the lights on, allowing the PJM-mandated transmission upgrades to continue, while to the maximum extent practicable remaining consistent with environmental law and minimizing the adverse effects of power generation on human health and the environment. The September Order is tailored to accomplish those goals. Accordingly, Sierra Club's petition for rehearing is denied.

³⁰ Sierra Club cites this inapposite study because it references the Yorktown facility. The study was actually based on 5-year concentrations for pollutants that were calculated based on information from 2005-2009, and the maximum individual risk for each facility was calculated based on "risk associated with a continuous lifetime (24 hours per day, 7 days per week, and 52 weeks per year for a 70-year period) exposure to the maximum concentration." EPA Memorandum at 12.

³¹ Sierra Club incorporates by reference Section IV.C of its original Petition. *See* Petition at 8 n.5. The substantive arguments raised therein have been addressed above.

From:

Jereza, Catherine

To:

Konieczny, Katherine; Bittner, Kathy (CONTR)

Cc:

<u>Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew</u> RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Subject: Date:

Monday, November 06, 2017 3:56:48 PM

Perfect – thank you all and congrats to a job well done! I will add Kevin and change my greeting to "afternoon" since we are doing this before 4pm today ©

Cheers

Katie

From: Konieczny, Katherine

Sent: Monday, November 06, 2017 3:51 PM **To:** Bittner, Kathy (CONTR); Jereza, Catherine

Cc: Drake, Christopher; Batra, Rakesh; Rosenbaum, Matthew

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Looks like the right one. Attached as pdf with name omitting the date/time. I also added one email address to the draft notification email below. Kevin Finto is outside counsel to Dominion and he signed Dominion's last filing.

-Kathy K

From: Bittner, Kathy (CONTR)

Sent: Monday, November 06, 2017 3:39 PM

To: Jereza, Catherine < Catherine.Jereza@Hq.Doe.Gov>

Cc: Konieczny, Katherine < Katherine.Konieczny@Hq.Doe.Gov >; Drake, Christopher

<<u>Christopher.Drake@hq.doe.gov</u>>; Batra, Rakesh <<u>Rakesh.Batra@Hq.Doe.Gov</u>>; Rosenbaum,

Matthew < Matthew. Rosenbaum@hq.doe.gov>

Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Sure, here it is.

From: Jereza, Catherine

Sent: Monday, November 06, 2017 3:36 PM

To: Bittner, Kathy (CONTR) < Kathy.Bittner@hq.doe.gov>

Cc: Konieczny, Katherine < Katherine.Konieczny@Hq.Doe.Gov>; Drake, Christopher

<Christopher.Drake@hq.doe.gov>; Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov>; Rosenbaum,

Matthew < Matthew. Rosenbaum@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – do you have the electronic version that includes John Lucas' edits? Can you send so we can make sure the right version goes out.

Once we have that, I'll be sending the email out below.

Thanks!

Katie

From: Jereza, Catherine

To: <u>Steven.Pincus@pim.com</u>; <u>craig.glazer@pim.com</u>; <u>michael.regulinski@dominionenergy.com</u>; <u>sanjay.narayan@sierraclub.org</u>; <u>casey.roberts@sierraclub.org</u>; <u>bridget.lee@sierraclub.org</u>;

kfinto@hunton.com

Cc: Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine

Subject: DOE Order 202-18-1

Good evening,

Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are attached.

Regards,

Katie

From: Bittner, Kathy (CONTR)

Sent: Monday, November 06, 2017 3:07 PM

To: Jereza, Catherine < Catherine.Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew < Matthew.Rosenbaum@hq.doe.gov > Subject: RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

HI Katie and Matt,

Just wanted to make sure that you are aware that the order was signed (see attached).

Let me know if you need anything else.

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Bittner, Kathy (CONTR)

Sent: Friday, November 03, 2017 3:31 PM

To: Jereza, Catherine < Catherine. Jereza@Hq.Doe.Gov>

Cc: Rosenbaum, Matthew < Matthew.Rosenbaum@hq.doe.gov > **Subject:** RE: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Katie and Matt,

FYI...I took the package to Exec Sec. It has cleared Exec Sec review and is with the Deputy Secretary

กกพ

Have a great weekend.

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy

Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

From: Jereza, Catherine

Sent: Friday, November 03, 2017 12:35 PM

To: Bittner, Kathy (CONTR) < Kathy.Bittner@hq.doe.gov>

Subject: FW: URGENT!! OE 202c related by 5pm Mon (2017-007724)

Hi Kathy – I'm in my office now.

Cheers Katie From:

To:

Steven.Pincus@pim.com; craiq.qlazer@pim.com; michael.requlinski@dominionenergy.com; sanjay.narayan@sierraclub.orq; casey.roberts@sierraclub.org; bridget.lee@sierraclub.org; kfinto@hunton.com

Cc:

Walker, Bruce; Hoffman, Patricia; Batra, Rakesh; Konieczny, Katherine

Subject:

Date:

DOE Order 202-18-1

Monday, November 06, 2017 3:59:07 PM

Attachments:

Signed Order 202-18-1.pdf

Summary of Findings Order No. 202-18-1.pdf

Good afternoon,

Today the Secretary of Energy issued Order No. 202-18-1. The Order and Summary of Findings are attached.

Regards,

Katie

Catherine Jereza

Deputy Assistant Secretary, Transmission Permitting & Technical Assistance Office of Electricity Delivery & Energy Reliability U.S. Department of Energy (o) 202.586.0334

(c) (b) (6)

Aleisha Harris aleisha.harris@liq.doe.gov 202.586.3876

^{**} Please contact Aleisha for all meeting and scheduling requests. **

From:

Drake, Christopher

To:

Jereza, Catherine

Cc:

Batra, Rakesh; Rosenbaum, Matthew; Konieczny, Katherine

Subject:

RE: DOE Order 202-18-1

Date:

Monday, November 06, 2017 4:01:00 PM

Katie.

Yes, we'll take care of it.

----Original Message----

From: Jereza, Catherine

Sent: Monday, November 06, 2017 4:00 PM

To: Konieczny, Katherine < Katherine.Konieczny@Hq.Doe.Gov>

Cc: Drake, Christopher < Christopher. Drake@hq.doe.gov>; Batra, Rakesh < Rakesh. Batra@Hq.Doe.Gov>;

Rosenbaum, Matthew < Matthew. Rosenbaum@hq.doe.gov>

Subject: RE: DOE Order 202-18-1

I guess this is a go on the website postings, etc. Can you help with that again?

----Original Message----

From: Konieczny, Katherine

Sent: Monday, November 06, 2017 2:00 PM

To: Jereza, Catherine < Catherine. Jereza@Hq.Doe. Gov>

Cc: Drake, Christopher < Christopher. Drake@lq.doe.gov>; Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov>;

Rosenbaum, Matthew < Matthew. Rosenbaum@hq.doe.gov>

Subject: DOE Order 202-18-1

Importance: High

Hi Katie, (b) (5)

Thanks,

Kathy

----Original Message----

From: Jereza, Catherine

Sent: Thursday, September 14, 2017 6:27 PM

To: Steven.Pincus@pjm.com; craig.glazer@pjm.com; michael regulinski@dominionenergy.com;

sanjay narayan@sierraclub.org; casey roberts@sierraclub.org; bridget.lee@sierraclub.org

Ce: Hoffman, Patricia <Pat.Hoffman@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>; Konieczny,

Katherine < Katherine. Konieczny@Hq.Doe.Gov>

Subject: DOE Order 202-17-4

Good evening,

Today the Secretary of Energy issued Order No. 202-17-4. The Order and Summary of Findings are attached.

Regards,

Katie

Catherine Jereza

Deputy Assistant Secretary, Transmission Permitting & Technical Assistance

Office of Electricity Delivery & Energy Reliability

U.S. Department of Energy (o) 202.586.0334 (c) (b) (6)

Aleisha Harris aleisha.harris@hq.doe.gov 202.586.3876

** Please contact Aleisha for all meeting and scheduling requests. **

From:

Michael Regulinski

To:

Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine

Cc:

Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O"Hara, Chris; Burlew, James

M.; Mohammed Alfayyoumi; Mike Barmer; casey.roberts@sierraclub.org; saniay.narayan@sierraclub.org

Subject:

Yorktown Units Test Run Report; DOE Order No. 202-17-4

Date: Attachments: Thursday, November 09, 2017 5:39:44 PM DOE Report Nov 9 2017 Yorktown Test Run.pdf

YT12 Intake Circulating Water Usage Oct 2017.xlsx

Yorktown Bi-Weekly Hourly Emissions Data 20171017-20171030.xlsx

Please see attached Yorktown Test Run Report required by DOE Order No. 202-17-4. Please let me know if you have any questions. Thanks,

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C:(b)(6)

michael.regulinski@dominionenergy.com

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Dominion Energy Services, Inc. Law Department 120 Tredegar Street, Richmond, VA 23219 DominionEnergy.com



The Honorable James Richard Perry Secretary of the Energy United States Department of Energy 1000 Independence Ave, SW Washington, DC 20585

Re: Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4

Dear Secretary Perry:

Pursuant to Order No. 202-17-4 (the "Order") issued on September 14, 2017, by the Secretary of Energy ("Secretary"), PJM Interconnection, L.L.C. ("PJM") and Dominion Virginia Electric and Power Company ("Dominion Energy Virginia") respectfully submits the attached reports regarding a test run of Yorktown Units 1 and 2 on October 25 2017 in accordance with the Secretary's directive to "report all dates on which Yorktown Unites 1 and 2 are operated as well as the estimated emissions and water usage data associated with their operations."

In the PJM application submitted June 13, 2017 (incorporated by reference in the PJM August 24 renewal application), PJM explained that emissions from the plant would occur at times outside of periods where PJM dispatches the Yorktown units for reliability. These times include basic, periodic, and compliance related activities undertaken to ensure the units remain reliable and capable of operating when necessary. These activities are consistent with normal operating procedures and good engineering practices. These activities include operating equipment for maintenance testing and reliability check out, testing of fuel systems, tuning of units, required emissions or operational testing, and other operating procedures. Without performing these activities Dominion Energy Virginia may not be prepared to run the Yorktown Units when directed by PJM to ensure reliability.

Order at page 2. The Order is for the period September 15 to December 14, and directs the emission report to be submitted every two weeks. November 9 is the end of the fourth two week period.

² PJM Application at page 13, incorporated by reference in the PJM Renewal Application at page 1.

On October 25, for approximately 5 hours Dominion Energy Virginia tested equipment on the Yorktown Units as part of a quarterly effort to ensure reliability of these two units when called upon by PJM to provide grid stability. This testing included running sub-systems and firing of ignitors and warm up burners to functionally test and verify operation for start-up. Dominion Energy Virginia did not fire the boiler for any extended period but just long enough to cycle through all the ignitors and warm up the burners. The Company tests each unit individually; the first run was the unit 1 reliability test and the second run was the unit 2 reliability test run. The two tests differed in duration due to troubleshooting of equipment issues for the start-up as well as working through some opacity issues that is commonplace when a boiler sits for a period of time and ash settles in the ductwork.

Dominion Energy Virginia does not plan on testing these units again this year but will likely test again at the beginning of 2018 depending on whether PJM dispatches the units and they operate before the end of December. If PJM dispatches the units, Dominion Energy Virginia plans on conducting these tests 2-1/2 to 3 months after the last run. For example, PJM dispatches the units in mid-December, Dominion Energy Virginia would not test again until near the end of March, but if PJM dispatches the units in late December, January, or February the units would not test again until near the end of May.³

Attachment 1 to this report is the Yorktown Power Station Bi-weekly Emissions Data for October 17 to October 30 that shows the actual runtime and air emissions data for the period. This spreadsheet includes hourly runtime data for the equipment for the Yorktown units, and raw and calculated data showing emissions data associated with operations of the equipment. Note that the Yorktown generators did not generate any power transmitted to the grid during the test.

The information in Attachment 1 reports hourly emissions of PM-10 and SO2 in pounds per hour and pounds per million BTU, and mercury in pounds per hour and pounds per trillion BTU (Mercury and Air Toxics Standards (MATS) format) for the operating period beginning August 21 through August 23, 2017. Additionally, Attachment 1 provides hourly emissions of NOx in pounds per hour, greenhouse

³ The later test date runs assumes, of course, that PJM submits another renewal application which is subsequently granted by the Secretary.

gases (as CO2) in tons per hour, lead in pounds per hour, HCl in pounds per hour, HF in pounds per hour, and CO in pounds per hour. NOx and SO2 emissions are based on valid hours of Continuous Emissions Monitoring System (CEMS) data for the period. PM-10 emissions are based on the emission factor derived from the July 21, 2017 stack test (0.0168 lbs/mmBtu corrected to 0.1143 lbs/mmBtu calculated for PM-10 filterable plus condensable). CO2 emissions are based on valid CEMS hours for the operating period. All other emissions were calculated using emission factors from AP-42, Fifth Edition, Volume 1, Chapter 1: External Combustion Sources and calculated hourly coal consumption in tons.⁴

Attachment 2 of this report is entitled "Yorktown Power Station October 2017 Circulating Water Usage for Reliability Test." This report provides the intake circulating water usage for the Yorktown units tests.

PJM and Dominion Energy Virginia respectfully submits the information in this report be accepted by the Secretary as compliant with the Order's directives to report all dates on which Yorktown Units 1 and 2 are operated well as the estimated and actual emissions and water usage data associated with their operations.

Respectfully submitted,

Michael C. Regulinski Managing General Counsel Dominion Energy Services, Inc. 120 Tredegar Street, RS-2 Richmond, Virginia 23219

Phone: (804) 819-2794

Email: michael.regulinski@dominionenergy.com

⁴ Mercury and lead emissions were calculated using AP-42, Table 1.1-18. CO emissions were calculated using emission factors from AP-42, Table 1.1-3. Total HAP metals and individual HAP metals are not provided because MATS Table 2 (40 CFR 63, Subpart UUUUU) provides for compliance with either the PM limit or total non-mercury HAP metals limits or individual HAP metals. Dominion Energy Virginia is providing PM-10 emissions for the purposes of MATS. HCl and HF emissions were calculated using emission factors from AP-42, Table 1.1-15.

Steven R. Pincus
Associate General Counsel
PJM Interconnection, L.L.C.
955 Jefferson Avenue
Valley Forge Corporate Center
Norristown, PA 19403-2497
Phone: 610-666-4370
Email: pincus@pim.com

Craig Glazer VP, Federal Government Policy PJM Interconnection, L.L.C.

Cc: Pat Hoffman, U.S. Department of Energy Catherine Jereza, U.S. Department of Energy Rakesh Batra, U.S. Department of Energy Michael C. Regulinski, Dominion Energy Services, Inc. Casey Roberts, Sierra Club Environmental Law Program Yorktown Power Station October 2017 Circulating Water Usage for Re

Unit	On-Line	Off-Line	Days On-Line	Start-up Notification	Tubine Metal Temp < 300 deg	
1	10/25/17 15:41	10/25/17 21:27	0.24	10/25/17 15:41	10/25/17 21:27	
	10/25/17 15:11	20/20/41	Million gallons of Intake Circulating Water I			

Unit	On-Line	Off-Line	Days On-Line	Start-up Notification	Tubine Metal Temp < 300 deg
2	10/25/17 22:02	10/26/17 0:22	0.10	10/25/17 22:02	10/26/17 0:22
	<u> </u>		Million gallons of Intake Circulating Water t		

Total million gallons through Unit 1

liability Test

Total Cooling Water Days	Total Water Amount (Mgal)
0.24	34
ırough Unit 1	34

Total Cooling Water Days	Total Water Amount (Mgal)
0.10	14
rough Unit 2	14

& 2	48

Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load	Unit 2 Load					Comn	Common Stack					
			Ope	Heat Input					OTIMA	1 1 1 1 1 1 1	Mercury		17
Date & Hour	(Gross MW)	Date & Hour (Gross MW) (Gross MW)	(x.xx Hour)	(mmgtn)	NOx (Ibs)	502 (Lbs)	CO2 (Tons)	Coal (Tons)	(sq ₁)	Lead (LDS)	(LDS) HCI	(DS) HF	(son)
10-17-2017 00	0	-	9.00	0.0	0.0		0.0	00.00	0	0	0	0	0
				0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 02	0		00.00	0,0	0,0		0:0	0.00	0	0	0	0	0
10-17-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 04	o		0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 05			00'0	0.0	0.0	0.0	0.0	0,00	0	0	0	0	0
10-17-2017 06	U	0	0.00	0.0	0.0	0,0	0.0	0.00	0	0	0	0	0
10-17-2017 07	o		00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 08			00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 09	0	0	00:00	0,0	0.0	0.0	0.0	00'0	0	0	0	0	0
10-17-2017 10			00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 11	J	0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 12	-		00.00	0,0	0.0	0.0	0,0	00.00	0	0	0	0	0
10-17-2017 13			0.00	0.0	0.0	0,0	0.0	0.00	0	0	0	0	0
10-17-2017 14		0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 15	J	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 16			0.00	0,0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 17			00.00	0,0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 18			00'0	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-17-2017 19			00:00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-17-2017 20			0.00	0,0	0.0	0.0	0.0		0	0	0	0	0
10-17-2017 21	•	0 0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-17-2017 22	•		0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-17-2017 23			0.00		0,0	0,0	0.0		0	0	0	0	0
10-18-2017 00	-	0	0.00		0.0	0.0	0.0		0	0	0	0	0
10-18-2017 01					0.0	0.0	0.0		0	0	0	0	0
10-18-2017 02			0000	0.0	0.0	0.0	0.0		0	0	0	0	0
10-18-2017 03			0.00		0.0	0.0	0,0		0	0	0	0	0
10-18-2017 04			0.00		0.0	0.0	0.0		0	0	0	0	0
10-18-2017 05			00,00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-18-2017 06			0.00	0.0	0,0	0.0	0.0	0.00	0	0	0	0	0
10-18-2017 07		0	0.00		0.0	0.0	0,0	_	0	0	0	0	0
10-18-2017 08					0.0	0.0	0.0		0	0	0	0	0
10-18-2017 09					0.0	0.0	0.0	_	0	0	0 (0 '	0 1
10-18-2017 10		0	0.00			0.0		_	0	0	0	0	0 1
10-18-2017 11		0	0.00	0.0	0,0	0,0	0.0	0,00	0	0	0	0	0



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load Unit 2 Load	Unit 2 Load					Сош	Common Stack					
			Operation	Heat Input					PIM10		Mercury		
Date & Hour (Gross MW) (Gross MW)	(Gross MW)	(Gross MW)	(x.xx Hour)	(mmBtn)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	(Lbs)	Lead (Lbs)	DH (sq.)	(Lbs) HF	(rps)
10-18-2017 12		0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	. 0	. 0		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	0			0,0	0,0	0,0	0.0	0.00	0	0	0	0	0
10-18-2017 15	0		0.00	0.0	0'0	0.0	0.0	00'0	0	0	0	0	0
10-18-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	00'0	0	0	0	0	0
10-18-2017.17	0		0.00	0,0	0.0	0.0	0.0	0,00	0	0	0	0	0
10-18-2017 18	0	0	00.00	0.0	0.0	0,0	0.0	0.00	0	0	0	0	0
10-18-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-18-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-18-2017 21	0	0	0.00	0,0	0.0	0.0	0.0	00:00	0	0	0	0	0
10-18-2017 22	0	0	0.00	0,0	0.0	0.0	0.0		0	0	0	0	0
10-18-2017 23	0	0	0.00	0.0	0.0	0:0	0.0		0	0	0	0	0
10-19-2017 00	0		00.00	0,0	0.0	0.0	0.0		0	0	0	0	0
10-19-2017 01	0	-	0.00	0.0	0,0	0.0	0,0		0	0	0	0	0
10-19-2017 02	0	-	00'0	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-19-2017 03	0	•	00:00	0.0	0.0	0.0	0,0		0	0	0	0	0
10-19-2017 04	0	0	00.00	0.0	0,0	0.0	0.0		0	0	0	0	0
10-19-2017 05	0	0	00:00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-19-2017 06	0		00'0	0.0	0.0	0.0			0	0	0	0	0
10-19-2017 07	U		00:00	0.0	0:0	0.0			0	0	0	0	0
10-19-2017 08	0		00.00	0,0	0.0	0.0	0.0		0	0	0	0	0
10-19-2017 09	J		00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-19-2017 10	0	0	00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-19-2017 11				0.0	0.0	0.0			0	0	0	0	0
10-19-2017 12	0			0.0	0.0	0.0			0	0	0	0	0
10-19-2017 13	0		0.00	0.0	0.0	0.0			0	0	0	0	0
10-19-2017 14	J		0.00	0.0	0.0	0.0			0	0	0	0	0
10-19-2017 15	J		0.00		0,0	0.0			0	0	0	0	0
10-19-2017 16		0	0.00	0.0	0.0	0.0			0	0	0	0	0
10-19-2017 17	0		0.00	0.0	0.0	0.0	Ö		0	0	0	0	0
10-19-2017 18	_	0	00.00	0.0	0.0	0.0	Ó	-	0	•	0	0	0
10-19-2017 19	_	0		0.0	0.0	0.0			0	0	0	0	0
10-19-2017 20	J	0	00:00	0.0	0.0	0.0	Ö		0	0	0	0	0
10-19-2017 21	,	0	00.00	0.0	0.0	0.0	0.0	_	0	0	0	0	0
10-19-2017 22		0	0.00	0'0	0.0	0.0			0	0	0	0	0
10-19-2017 23	_		0.00	0.0	0.0	0.0	0.0	00:00	0	0	0	0	0



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load Unit 2 Load	Unit 2 Load					Сомп	Common Stack					
			Operation	Heat Input							Mercury		,
Date & Hour	Date & Hour (Gross MW) (Gross MW)	(Gross MW)	(x.xx Hour)	(mmBtu)	NOx (Lbs)	SO2 (lbs)	CO2 (Tons)	Coal (Tons)) [sq1)	Lead (Lbs)	(Lbs) HCI	(Lbs) HF	(Fps)
10-20-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	0	0		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 02	0	0	00'0	0.0	0,0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 03	0	0	0.00	0.0	0.0	0.0	0.0	00.00	0	0	0	0	0
10-20-2017 04	0	0	0.00	0.0	0.0	0.0	0:0	0.00	0	0	0	0	0
10-20-2017 05	0	0	0.00	0.0	0:0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 06		0		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 07	0	0		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 08	0	0		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 09		0	0.00	0,0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 10		0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 11	0	0	00.00	0.0	0:0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 12	0		00'0	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 13	0	0	00.00	0.0	0,0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 14	0	0			0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 15	0	o		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 16	0		00.00	0.0	0.0	0,0	0.0	0.00	0	0	0	0	0
10-20-2017 17	0		00.00	0.0	0,0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 18	0			0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-20-2017 19	0	0			0.0			0.00	0	0	0	0	0
10-20-2017 20	0				0,0			0.00	0	0	0	0	0
10-20-2017 21	0				0.0	0.0		00.00	0	0	0	0	0
10-20-2017 22					0.0			0.00	0	0	0	0	0
10-20-2017 23	•			0.0	0.0		0.0	00:00	0	0	0	0	0
10-21-2017 00	0		0.00						0	0	0	0	0
10-21-2017 01									0	0	0	0	0
10-21-2017 02	_			0.0	0.0				0	0	0	0	0
10-21-2017 03					0.0				0	0	0	0	0
10-21-2017 04	0		00.00	0.0	0.0	0'0			0	0	0	0	0
10-21-2017 05	0		0.00	0.0	0.0				0	0	0	0	0
10-21-2017 06	0		0.00	0.0	0.0	0.0			0	0	0	0	0
10-21-2017 07	0				0.0				0	0	0	0	0
10-21-2017 08			0.00		0.0		o		0	0	0	0	0
10-21-2017 09	0			0.0	0.0				0	0	0	0	0
10-21-2017 10	0	_	0.00		0,0				0	0	0	0	0
10-21-2017 11		_		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load	Unit 2 Load					Соти	Common Stack					
			Operation	Heat Input					PMT0				
Date & Hour	(Gross MW)	Date & Hour (Gross MW) (Gross MW)	(x.xx Hour)	(mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	(Lbs)	Lead (Lbs)	(Lbs) HCI	(Lbs) HF	(Lbs)
10-21-2017 12	0	-	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-21-2017 13	0	0	00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-21-2017 14	0	0	00'0	0.0	0.0	0,0	0.0	0.00	0	0	0	0	0
10-21-2017 15	0	0	00:00	0.0	0.0	0'0	0.0	0.00	0	0	0	0	0
10-21-2017 16	0	0	00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-21-2017 17	0	0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-21-2017 18	0	•	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-21-2017 19	0	•	00.00	0.0	0.0	0.0	0.0	00'0	0	0	0	0	0
10-21-2017 20		0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-21-2017 21	0		00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-21-2017 22		0	00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-21-2017 23	0		00.00	0.0	0.0	0.0	0.0	0.00	0	D	0	0	0
10-22-2017 00			00.00	0.0	0.0	0.0	0.0	00.0	0	0	0	0	0
10-22-2017 01		0	0.00	0.0	0,0	0.0	0.0	0.00	0	0	0	0	0
10-22-2017 02		0	00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-22-2017 03		0 0	00'0	0.0	0.0	0.0	0.0		0	0	0	0	0
10-22-2017 04		0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-22-2017 05	0			0.0	0.0	0.0	0.0		0	0	0	0	0
10-22-2017 06		0	00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-22-2017 07			0.00		0.0	0.0	0.0		0	0	0	0	0
10-22-2017 08		0	0.00	0,0	0.0	0.0	0.0		0	0	0	0	0
10-22-2017 09			00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-22-2017 10	0		00.00		0.0	0.0	0.0	0.00	0	0	0	0	0
10-22-2017 11			0.00		0.0	0.0	0.0		0	0	0	0	0
10-22-2017 12	•		0.00		0.0	0.0	0.0		0	0	0	0	Đ
10-22-2017 13			00.00		0.0	0.0	0.0		0	0	0	0	0
10-22-2017 14			00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-22-2017 15		0	0.00		0.0	0.0	0'0		0	0	0	0	0
10-22-2017 16			0.00	0.0	0,0	0.0	0.0		0	0	0	0	0
10-22-2017 17		0	0.00		0.0	0.0	0.0	0.00	0	0	0	0	0
10-22-2017 18					0.0	0,0	0.0		0	0	0	0	0
10-22-2017 19			0.00		0.0	0.0	0.0		0	0	0	0	0
10-22-2017 20			0.00		0.0		0.0		0	0	0	0	Ö
10-22-2017 21			00.00	0.0	0.0	0:0	0.0		0	0	0	0	0
10-22-2017 22		0	00.00		0.0	0.0	0.0	0,00	0	0	0	0	0
10-22-2017 23			00.00	0.0	0.0	0,0	0.0		0	0	0	0	0



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load	Unit 2 Load					Com	Common Stack					
28				Heat Input			i, de		PMTO	10101		251 (**41)	7
	Date & Hour(Gross MW)(Gross MW)	(Gross MW)	(x,xx Hour)	(mmBtu)	NOX (Lbs)	SOZ (LDS)	CO2 (Tons)	Coal (Tous)	(sq.)	read (ros)	Du (son)		(cos)
10-23-2017 00	0	0			0.0	0.0	0.0	00.00	0	0	0	0	0
10-23-2017 01	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-23-2017 02		0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 03	0	0		0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 04		0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 05		0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 06	0	0	00'00	0,0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-23-2017 07		0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-23-2017 08		0	00:00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 09		0	00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 10		0	00:00	0.0	0,0	0.0	0.0	0.00	0	0	0	0	0
10-23-2017 11		0	00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-23-2017 12		0	00.00	0.0	0.0	0,0	0.0		0	0	0	0	0
10-23-2017 13		•	00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 14		0	00:00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 15		•	00.00		0.0	0.0	0.0		0	0	0	0	0
10-23-2017 16	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-23-2017 17			00.00		0.0	0.0	0.0	0.00	0	0	0	0	0
10-23-2017 18	0		00.00		0.0	0.0	0.0		0	0	0	0	0
10-23-2017 19			00.00		0.0	0.0	0.0		0	0	0	0	0
10-23-2017 20			0.00	0,0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 21	0		0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-23-2017 22	0		_		0.0	0.0	0.0		0	0	0	0	0
10-23-2017 23			0.00		0.0				0	0	0	0	0
10-24-2017 00					0,0				0	0	0	0	0
10-24-2017 01			00.00		0.0	0.0			0	0	0	0	0
10-24-2017 02				0.0	0.0	0.0	0.0		0	0	0	0	0
10-24-2017 03			0.00	0.0	0.0	0.0			0	0	0	0	0
10-24-2017 04			0.00		0.0	0,0			0	0	0	0	0
10-24-2017 05	0		0.00		o	0.0			0	0	0	0	0
10-24-2017 06					0.0	0.0			0	0	0	0	0
10-24-2017 07			0.00	0.0	0.0				0	0	0	0	0
10-24-2017 08			0.00		0.0				0	0	0	0	0
10-24-2017 09			0.00	0.0	0.0	0.0			0	0	0	0	0
10-24-2017 10	0		0.00			0.0		_	0	0	0	0	0
10-24-2017 11			0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load	Unit 1 Load Unit 2 Load					Сошп	Common Stack					
20000			Operation	Heat Input					PM10		Mercury	-	
Date & Hour	(Gross MW)	Date & Hour (Gross MW) (Gross MW)		(mmBtu)	NOx (lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	(sqn)	Lead (lbs)	H (sq1)	HCl (lbs)	HF (Lbs)
7	c	•	5	c	Ċ	c	c	000	o	0	0	0	0
10-24-201/ 12				6 6	0 0		0.0	0.00	0	0	0	0	0
				0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
		0	0.00	0.0	0.0	0.0	0.0	00'0	0	0	0	0	0
10-24-2017 16	0	•	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-24-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-24-2017 18	0	•	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-24-2017 19	0	0	00.00	0.0	0.0	0.0	0.0	00'0	0	0	0	0	0
10-24-2017 20	•	0	00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-24-2017 21	0	0	00:00	0.0	0.0	0.0	0.0	00'0	0	o´	0	0	0
10-24-2017 22	•	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-24-2017 23	•	0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-25-2017 00	-	0	00'0	0.0	0.0	0.0	0.0	00,00	0	0	0	0	0
10-25-2017 01	•	0	00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-25-2017 02	•	0	00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-25-2017 03	•	0	00'0	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-25-2017 04	0		00.00	0.0	0.0	0.0			0	0	0	0	0
10-25-2017 05		0	00.00	0.0	0.0	0.0	0.0	00.00	0	0	0	0	0
10-25-2017 06		0	00.00	0.0	0.0	0.0	0.0	00.00	0	0	0	0	0
10-25-2017 07			0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-25-2017 08		0	0.00	0.0	0.0	0.0	0.0	0,00	0	0	0	0	0
10-25-2017 09			0.00		0.0	0.0			0	0	0	0	0
10-25-2017 10			00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-25-2017 11		0	0.00	0.0	0.0	0.0			0	0	0	0	0
10-25-2017 12			0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-25-2017 13		0	0.00	0.0	0.0	0.0			0	0	0	0	0
10-25-2017 14			0.00	0.0	0.0				0	0	0	0	0
10-25-2017 15			0.00	0.0	0.0				0	0	0	0	0
10-25-2017 16			00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-25-2017 17		0	0 0.20	2.0	0.0	0.1		0.08	0.233172	5,7	6.75E-06	0.09753	0.012191
10-25-2017 18			0 1.00	10.6	0.0	9.0	1.1	0.42	1.21158		3,51E-05	0.506773	0.063347
10-25-2017 19			0 1.00	11.0	0.0				1.2573		3.64E-05	0.525896	0.065737
10-25-2017 20			0 0.93	21.8	0.1	0.3			2,487397	6.16E-0	7.2E-05	1,040414	0.130052
10-25-2017 21		0	0.00	0.0	0.0				0		0	0	0
10-25-2017 22					0.0				0		0	0	0
10-25-2017 23		0	0.50	11.4	0.1	0.1	1.2	0.45	1.297305	3.21E-05	3.75E-05	0.542629	0,067829



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load Unit 2 Load	Unit 2 Load					Comr	Common Stack					
		_ _	Operation	Heat Input					PM10		Mercury		
Date & Hour	Date & Hour (Gross MW) (Gross MW)	(Gross MW)		(mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	(sqn)	Lead (Lbs)	(FPS) HCI	(Lbs) HF	(Ps)
10-26-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	00'0	0	0	0	0	0
	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-26-2017 02	0	0	00'0	0.0	0.0		0.0		0	0	0	0	0
10-26-2017 03	0	0	00.00	0.0	0.0		0.0		0	0	0	0	0
10-26-2017 04	0	0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-26-2017 05	0	0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-26-2017 06	0	0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-26-2017 07		0	00:00	0.0	0.0	0.0	0.0	00.00	0	0	0	0	0
10-26-2017 08		•	00'0	0.0	0.0		0.0		0	0	0	0	0
10-26-2017 09		0	00:00	0.0	0.0		0.0		0	0	0	0	0
10-26-2017 10			0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-26-2017 11			00:00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-26-2017 12		0	00:00	0.0	0.0		0.0		0	0	0	0	0
10-26-2017 13		0	00:00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-26-2017 14	0	•	00:00	0.0	0.0		0.0	0.00	0	0	0	0	0
10-26-2017 15		•	00'0	0.0	0.0		0.0		0	0	0	0	0
10-26-2017 16			00:00	0.0	0.0		0.0		0	0	0	0	0
10-26-2017 17	0	-	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-26-2017 18			00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-26-2017 19			00.00	0.0	0.0				0	0	0	0	0
10-26-2017 20	0		00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-26-2017 21	•		0.00		0.0				0		0	0	0
10-26-2017 22	0		00'00		0.0		0.0	00:00	0		0	0	0
10-26-2017 23	0				0.0				0	_	0	0	0
10-27-2017 00	0		0.00		0.0				0		0	0	0
10-27-2017 01			00'0	0.0	0.0				0	_	0	0	0
10-27-2017 02			0.00	0.0	0.0				0	0	0	0	0
10-27-2017 03			0.00	0.0	0.0		0.0		0	-	0	0	0
10-27-2017 04			00.00	0.0	0.0				0	_	0	0	0
10-27-2017 05	0		00.00		0.0				0		0	0	0
10-27-2017 06			0.00		0.0				0		0	0	0
10-27-2017 07	0		0.00	0.0	0.0				0		0	0	0
10-27-2017 08			00.00		0.0				0		0	0	0
10-27-2017 09	0		00.00		0.0				0	0	0	0	0
10-27-2017 10	0		00:00		0.0			00'00	0	0	0	0	0
10-27-2017 11			0.00	0.0	0.0	0.0			0	•	0	0	0



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load (Unit 2 Load					Comp	Common Stack					
			Operation	Heat Input					PM10				
Date & Hour	Date & Hour (Gross MW) (Gross MW)	(Gross MW)	~	(mmBtu)	NOx (Lbs)	SO2 (Lbs)	CO2 (Tons)	Coal (Tons)	(Ips)	Lead (Lbs)	(Ibs) HCI	(Lbs) HF	(Ibs)
10-27-2017	c	C		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
		0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
	0	0		0.0	0,0	0'0	0.0	0.00	0	0	0	0	0
10-27-2017 15	0	0		0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-27-2017 16		0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-27-2017 17	_	0	00'0	0.0	0.0	0.0	0.0		0	0	0	0	0
	0	0	00.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-27-2017 19	0	0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-27-2017 20		0	00'0	0.0	0.0	0.0	0.0		0	0	0	0	0
10-27-2017 21		0	00:00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-27-2017 22	0	0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-27-2017 23		0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-28-2017 00	0	0	00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-28-2017 01	0	0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-28-2017 02	0	0	00.00		0.0	0.0	0.0		0	0	0	0	0
10-28-2017 03	0	0	00.00		0.0	0.0	0.0		0	0	0	0	0
10-28-2017 04	0	0	00.00		0.0	0.0	0.0		0	0	0	0	0
10-28-2017 05		0	0.00		0,0	0.0	0.0	0.00	0	0	0	0	0
10-28-2017 06		0	00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-28-2017 07	0 2	0	0.00	0.0	0.0	0.0			0	0	0	0	0
10-28-2017 08		0	0.00	0.0	0.0	0:0			0	0	0	0	0
10-28-2017 09		0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-28-2017 10		0		0.0	0.0	0.0			0	0	0	0	0
10-28-2017 11		0			0.0	0,0			0	0	0	0	0
10-28-2017 12	2 0	0	0.00		0.0	0.0			0	0	0	0	0
10-28-2017 13		0			0.0	0.0			0	0	0	0	0
10-28-2017 14			0.00	0.0	0.0	0.0			0	0	0	0	0
10-28-2017 15	0		0.00	0.0	0.0	0.0			0	0	0	0	0
10-28-2017 16			0.00	0.0	0.0	0,0			0	0	0	0	0
10-28-2017 17	0		0.00	0.0	0:0	0.0			0	0	0	0	0
10-28-2017 18			0.00						0	0	0	0	0
10-28-2017 19			0.00		0.0				0	0	0	0	0
10-28-2017 20	0		00.00	0.0		0.0			0	0	0	0	0
10-28-2017 21			0.00	0.0	0.0	0.0			0	0	0	0	0
10-28-2017 22	2 0		0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-28-2017 23			0.00	0.0	0.0	0.0			0	0	0	0	0



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load U	Unit 2 Load					Com	Common Stack					
to.			obe	Heat Input					OTIMA				1
	Date & Hour (Gross MW) (Gross MW)	(Gross MW)	(x.xx Hour)	(mmBtu)	NOx (Lbs)	502 (Lbs)	CO2 (Tons)	Coal (Tons)	(sq)	(sq1) pear	(IDS) HCI	TH (SGI)	
10-29-2017 00	0	0	0.00	0.0	0.0	0.0	0.0	00.00	0	0	0	0	0
	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 02	0	0	0.00	0.0	0.0	0.0	0'0	00'0	0	0	0	0	0
10-29-2017 03	0	0	0.00	0.0	0.0	0.0	0'0	0.00	0	0	0	0	0
10-29-2017 04	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 05	0	0	0.00	0.0	0,0	0,0	0.0	0.00	0	0	0	0	0
10-29-2017 06	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 07	0	0	0.00	0.0	0.0	0.0	0.0	00'0	0	0	0	0	0
10-29-2017 08	0	0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 09	0	0		0.0	0.0	0'0	0.0	0.00	0	0	0	0	0
10-29-2017 10	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 11	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 12	0	0	0.00	0.0	0,0	0.0	0.0	00'0	0	0	0	0	0
10-29-2017 13		0	00:00	0.0	0,0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 14	0	0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 15		0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 16		0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 17		0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-29-2017 18		0	00.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-29-2017 19	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	O	0	0
10-29-2017 20		0		0.0	0.0	0.0	0.0		0	0	0	0	0
10-29-2017 21		0		0.0	0.0	0.0	0.0		0	0	0	0	0
10-29-2017 22		0	0.00	0.0	0.0	0.0	0.0		0	0	O	0	0
10-29-2017 23		0	0.00	0,0	0.0		0.0		0	0	0	0	0
		0	0.00	0.0	0.0	0.0	0.0		0	0	0	0	0
10-30-2017 01		0	0.00	0.0	0.0				0	0	0	0	0
10-30-2017 02		O	0.00		0.0			0.8	0	0	0	0	0
10-30-2017 03		J	0.00		0.0				0	0	0	0	0
10-30-2017 04		5	0.00	0.0	0.0				0	0	0	0	0
10-30-2017 05		U	0.00	0.0	0.0				0	0	0	0	0
10-30-2017 06		J	0.00	0.0	0.0	0.0	0,0		0	0	0	0	0
10-30-2017 07		J	0.00	0.0	0,0				0	0	0	0	0
10-30-2017 08		J	0.00	0.0	0.0	0:0			0	0	0	0	0
10-30-2017 09		J	0.00	0.0	0.0			_	0	0	0	0	0
10-30-2017 10		0	0.00		0.0			_	0	0	0	0	0
10-30-2017 11		J	0.00	0.0	0.0	0.0	0.0	00'0	0	0	0	0	O



Dominion Energy - Yorktown Power Station Bi-Weekly Mass Emissions Oct 17, 2017 through Oct 30, 2017

	Unit 1 Load Unit 2 Load	Unit 2 Load					Сопп	Common Stack					
			Operation	Heat Input					PM10		Mercury		
Date & Hour	(Gross MW)	Date & Hour (Gross MW) (Gross MW) (x.xx	(x.xx Hour)	(mmBtu)	NOx (Lbs)	SO2 (Lbs)	SO2 (Lbs) CO2 (Tons) Coal (Tons)	Coal (Tons)	(sq1)	(Lbs) Lead (Lbs)	(Lbs) HCI	HCI (Lbs) HF	(Ibs)
		•											
10-30-2017 12	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 13	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 14	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 15	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 16	0	0	00'0	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 17	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 18	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 19	0	0	00:00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 20	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 21	0	0	0.00	0.0	0.0	0.0	0.0	0,00	0	0	0	0	0
10-30-2017 22	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
10-30-2017 23	0	0	0.00	0.0	0.0	0.0	0.0	0.00	0	0	0	0	0
		:	!	i	•	Ġ	L	ć			000	Lactor 0 00 not 0	7,000,0
		Bi-Weekly Total Ton	xtal Tons	26.8	0.0	0.0	S.v.	97.7	0.003243	8,035-08	9.56E-U8	0.001357	700
				mmBtu									

All data are collected and processed in accordance with Part 75. Data with orange fill are substituted in accordance with Part 75. Monthly sums may not agree with data published by EPA due to the handling of quarterly and annual totals.



Bittner, Kathy (CONTR)

To:

Batra, Rakesh

Cc:

Jereza, Catherine

Subject:

2017-008571 - Yorktown Run Test Run Report (Order 202-17-4)

Date:

Tuesday, November 14, 2017 1:21:35 PM

Attachments:

2017-008571 - Incoming.pdf

Hi Rakesh and Katie,

I believe that you both have received this, but wanted to send it just in case.

From a correspondence perspective, no further action is required.

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

Stanton, Kimberly (CONTR)

Michael Regulinski <michael.regulinski@dominionenergy.com> From:

Thursday, November 09, 2017 5:39 PM Sent:

Secretary Perry: Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine To: Cc:

Plncus, Steven; Bryson, Mike E.; Souder, David W.; Tarn, Simon K.; Glazer, Craig; O'Hara,

Chris; Burlew, James M.; Mohammed Alfayyoumi; Mike Barmer;

casey.roberts@sierraclub.org; sanjay.narayan@sierraclub.org

Subject: Yorktown Units Test Run Report; DOE Order No. 202-17-4

DOE Report Nov 9 2017 Yorktown Test Run.pdf; YT12 Intake Circulating Water Attachments:

Usage Oct 2017,xlsx; Yorktown Bi-Weekly Hourly Emissions Data

20171017~20171030.xisx

Please see attached Yorktown Test Run Report required by DOE Order No. 202-17-4. Please let me know if you have any guestions. Thanks,

Michael C. Regulinski **Managing General Counsel**

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C; (b) (6)

michael.regulinski@dominionenergy.com

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Konieczny, Katherine

To: Subject: <u>Batra, Rakesh</u> RE: DOE Informal Question

Date:

Tuesday, November 21, 2017 11:18:18 AM

Thanks, Rakesh! Happy Thanksgiving!

From: Batra, Rakesh

Sent: Tuesday, November 21, 2017 10:48 AM

To: Michael Regulinski; Pincus, Steven; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barmer

; Mohammed Alfayyoumi

Cc: Konieczny, Katherine; Drake, Christopher

Subject: DOE Informal Question

(b) (5)

Order No. 202-17-4 was issued on September 14, 2017. By its own terms and by statute, it expires on **December 13, 2017**. Ordering paragraph D. states that "[i]f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires." (b) (5)

Thanks, Rakesh Batra 202-586-1283

Pincus, Steven

To:

Batra, Rakesh; Michael Requlinski; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barmer; Mohammed

Alfayyoumi; Konieczny, Katherine; Tam, Simon K.; Bryson, Mike E.; Souder, David W.; Glazer, Craig

Cc:

Drake, Christopher; O"Hara, Chris; Mars, Jennifer A.

Subject:

PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

Date: Tuesday, November 21, 2017 2:57:06 PM

(b) (5)

Thank you and Happy Thanksgiving.

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6)

Steven.Pincus@pim.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

This e-mail message and any attached files are confidential and are solely for the use of the intended recipient.

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Tuesday, November 21, 2017 10:48 AM

To: Michael Regulinski; Pincus, Steven; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barmer; Mohammed

Alfayyoumi

Cc: Konieczny, Katherine; Drake, Christopher

Subject: DOE Informal Question

External Email! Think before clicking links or attachments.

(b) (5)

Order No. 202-17-4 was issued on September 14, 2017. By its own terms and by statute, it expires on **December 13, 2017**. Ordering paragraph D. states that "[i]f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires." (b) (5)

Thanks, Rakesh Batra 202-586-1283

Pincus, Steven

To:

Konieczny, Katherine; Batra, Rakesh; Michael Regulinski; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike

Barmer; Mohammed Alfavyoumi; Tam, Simon K.; Bryson, Mike E.; Souder, David W.; Glazer, Craiq

Cc:

Drake, Christopher; O"Hara, Chris; Mars, Jennifer A.; Rosenbaum, Matthew; Mills, Brian

Subjects

RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

Date: Wednesday, November 22, 2017 1:13:52 PM

We will try to reschedule for Tuesday.

From: Konjeczny, Katherine [mailto:Katherine.Konjeczny@Hq.Doe.Gov]

Sent: Wednesday, November 22, 2017 1:06 PM

To: Pincus, Steven; Batra, Rakesh; Michael Regulinski; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barmer;

Mohammed Alfayyoumi; Tam, Simon K.; Bryson, Mike E.; Souder, David W.; Glazer, Craig

Cc: Drake, Christopher; O'Hara, Chris; Mars, Jennifer A.; Rosenbaum, Matthew; Mills, Brian

Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

External Email! Think before clicking links or attachments.

It appears that none of the DOE program folks is available at 5pm Monday. Can the call be moved earlier in the day? Tuesday 11/28 is preferred.

From: Pincus, Steven [mailto:Steven.Pincus@pjm.com]

Sent: Wednesday, November 22, 2017 1:00 PM

To: Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov >; Michael Regulinski

<michael.regulinski@dominionenergy.com>; Sharon L. Burr <sharon.l.burr@dominionenergy.com>;

Miranda R Yost < Miranda.R. Yost@dominionenergy.com >; Rick R Linker

<rick.r.linker@dominionenergy.com>; Mike Barmer <mike.barmer@dominionenergy.com>;

Mohammed Alfayyoumi < mohammed.alfayyoumi@dominionenergy.com>; Konieczny, Katherine

< Katherine.Konieczny@Hq.Doe.Gov>; Tam, Simon K. < Simon.Tam@pim.com>; Bryson, Mike E.

<<u>Michael.Bryson@pjm.com</u>>; Souder, David W. <<u>David.Souder@pjm.com</u>>; Glazer, Craig

<Craig.Glazer@pim.com>

Cc: Drake, Christopher <<u>Christopher.Drake@hq.doe.gov</u>>; O'Hara, Chris <<u>Chris.OHara@pim.com</u>>; Mars, Jennifer A. <<u>Jennifer.Mars@pim.com</u>>; Mills, Brian <<u>Brian.Mills@hq.doe.gov</u>>; Rosenbaum, Matthew <<u>Matthew.Rosenbaum@hq.doe.gov</u>>

Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

The call is scheduled for Monday at 5:00. The call in numbers is included in the Outlook meeting invitation which you all should have received by now. If you need the numbers resent please let us know. Thank you. Steve

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Wednesday, November 22, 2017 12:57 PM

To: Michael Regulinski; Pincus, Steven; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barmer; Mohammed Alfayyoumi; Konieczny, Katherine; Tam, Simon K.; Bryson, Mike E.; Souder, David W.; Glazer, Craig

Cc: Drake, Christopher; O'Hara, Chris; Mars, Jennifer A.; Mills, Brian; Rosenbaum, Matthew

Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

External Email! Think before clicking links or attachments.

I guess Mr. Pincus didn't send out the call number. (b) (6) Rakesh

From: Michael Regulinski [mailto:michael.regulinski@dominionenergy.com]

Sent: Tuesday, November 21, 2017 5:07 PM

To: Batra, Rakesh <<u>Rakesh.Batra@Hq.Doe.Gov</u>>; Pincus, Steven <<u>Steven.Pincus@pjm.com</u>>; Sharon

L. Burr < sharon.l.burr@dominionenergy.com >; Miranda R Yost

<<u>Miranda.R.Yost@dominionenergy.com</u>>; Rick R Linker <<u>rick.r.linker@dominionenergy.com</u>>; Mike

Barmer < mike.barmer@dominionenergy.com >; Mohammed Alfayyoumi

<mohammed.alfayyoumi@dominionenergy.com>; Konieczny, Katherine

< Katherine.Konieczny@Hq.Doe.Gov>; Tam, Simon K. < Simon.Tam@pjm.com>; Bryson, Mike E.

< Michael. Bryson@pim.com >; Souder, David W. < David. Souder@pim.com >; Glazer, Craig

<<u>Craig.Glazer@pjm.com</u>>

Cc: Drake, Christopher < Chris < Chris.OHara@pim.com; Mars, Jennifer A. Lennifer.Mars@pim.com; Mills, Brian < Brian.Mills@hq.doe.gov; Rosenbaum,

Matthew < Matthew. Rosenbaum@hq.doe.gov>

Subject: RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal

Application Questions

I am available for a call tomorrow 11-12 EST. Please send a call in number. Thanks, Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Tuesday, November 21, 2017 3:12 PM

To: Pincus, Steven; Michael Regulinski (Services - 6); Sharon L. Burr (Services - 6); Miranda R Yost (Services -

6); Rick R Linker (Services - 6); Mike Barmer (VirginiaPower - 1T); Mohammed Alfayyoumi (VirginiaPower -

1T); Konieczny, Katherine; Tam, Simon K.; Bryson, Mike E.; Souder, David W.; Glazer, Craig

Cc: Drake, Christopher; O'Hara, Chris; Mars, Jennifer A.; Mills, Brian; Rosenbaum, Matthew

Subject: [External] RE: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

I am available tomorrow morning before noon. Not available on Monday. Next availability is Tuesday, Nov 28, any time except 10-11am.

Rakesh

From: Pincus, Steven [mailto:Steven.Pincus@pjm.com]

Sent: Tuesday, November 21, 2017 2:57 PM

To: Batra, Rakesh < Rakesh.Batra@Hq.Doe.Gov>; Michael Regulinski

<michael.regulinski@dominionenergy.com>; Sharon L. Burr

<sharon.l.burr@dominionenergy.com>; Miranda R Yost

< Miranda.R. Yost@dominionenergy.com >; Rick R Linker

<<u>rick.r.linker@dominionenergy.com</u>>; Mike Barmer <<u>mike.barmer@dominionenergy.com</u>>;

Mohammed Alfayyoumi < mohammed.alfayyoumi@dominionenergy.com >; Konieczny,

Katherine < Katherine.Konieczny@Hq.Doe.Gov>; Tam, Simon K. < Simon.Tam@pjm.com>;

Bryson, Mike E. < Michael. Bryson@pjm.com >; Souder, David W. < David. Souder@pjm.com >;

Glazer, Craig < Craig. Glazer@pjm.com>

Cc: Drake, Christopher < Christopher. Drake@hq.doe.gov>; O'Hara, Chris

<<u>Chris.OHara@pim.com</u>>; Mars, Jennifer A. <<u>Jennifer.Mars@pim.com</u>>

Subject: PJM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

PJM would like to schedule a conference with DOE staff and Dominion to discuss technical questions on the renewal application due next week. Please send my assistant Jenny Mars your availability for a call tomorrow afternoon or Monday.

Thank you and Happy Thanksgiving.

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C:(b) (6)

Steven.Pincus@pjm.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

This e-mail message and any attached files are confidential and are solely for the use of the intended recipient.

From: Batra, Rakesh [mailto:Rakesh.Batra@Hq.Doe.Gov]

Sent: Tuesday, November 21, 2017 10:48 AM

To: Michael Regulinski; Pincus, Steven; Sharon L. Burr; Miranda R Yost; Rick R Linker; Mike Barmer;

Mohammed Alfayyoumi

Cc: Konieczny, Katherine; Drake, Christopher

Subject: DOE Informal Question

External Email! Think before clicking links or attachments.

In preparations for renewal of Order No. 202-17-4, which expires in mid-December, now that PJM and/or Dominion will have enough data to answer the following question, we would like you to provide DOE a spreadsheet that reflects historical operations and emissions data for Units 1 and 2 for the years 2015-2017. Please provide the same categories of information (run time, MW, emissions, etc.) and in the same format used in Attachment 3 of the September Report on Yorktown Units 1 and 2 Operations Pursuant to Order No. 202-17-4.

Order No. 202-17-4 was issued on September 14, 2017. By its own terms and by statute, it expires on **December 13, 2017**. Ordering paragraph D. states that "[i]f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before this Order expires." (b) (5)

PJM's renewal request would therefore be due no later

than Wednesday, November 29.

Thanks, Rakesh Batra 202-586-1283

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transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

Pincus, Steven

To:

Glazer, Craiq; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; michael.requlinski@dominionenergy.com; sharon, I.burr@dominionenergy.com; Konieczny, Katherine; Drake, Christopher; Mills, Brian; Rosenbaum,

Matthew; Batra, Rakesh

Subject:

RE: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

Date:

Monday, November 27, 2017 10:53:57 AM

DOE Representatives: (b) (5)

Thank you. Steve

----Original Appointment-----

From: O'Hara, Chris

Sent: Wednesday, November 22, 2017 10:32 AM

To: O'Hara, Chris; Glazer, Craig; Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Egan, David M.; michael.regulinski@dominionenergy.com; sharon.l.burr@dominionenergy.com;

Miranda.R. Yost@dominionenergy.com; mohammed.alfayyoumi@dominionenergy.com;

mike.barmer@dominionenergy.com; rick.r.linker@dominionenergy.com;

Katherine.Konieczny@Hq.Doe.Gov; Christopher.Drake@hq.doe.gov; Brian.Mills@hq.doe.gov;

Matthew.Rosenbaum@hq.doe.gov; 'Rakesh.Batra@Hq.Doe.Gov'

Subject: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application

Questions

When: Monday, November 27, 2017 5:00 PM-6:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Conference Call Participants: (b) (6)

Meeting Access ID: (b) (6)

AUTO DIAL WITH PASSCODE: (b) (6)

Jenny

Konieczny, Katherine

To:

Pincus, Steven; Drake, Christopher; Mills, Brian; Rosenbaum, Matthew; Batra, Rakesh

Subject: Date: RE; JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application Questions

Monday, November 27, 2017 10:55:48 AM

(b) (6), (b) (5)

From: Pincus, Steven [mailto:Steven.Pincus@pjm.com]

Sent: Monday, November 27, 2017 10:54 AM

To: Glazer, Craig; Bryson, Mike E.; Souder, David W.; Tam, Simon K.;

michael.regulinski@dominionenergy.com; sharon.l.burr@dominionenergy.com; Konieczny,

Katherine; Drake, Christopher; Mills, Brian; Rosenbaum, Matthew; Batra, Rakesh

Subject: RE: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application

Questions

DOE Representatives: (b) (5)

Thank you, Steve

----Original Appointment----

From: O'Hara, Chris

Sent: Wednesday, November 22, 2017 10:32 AM

To: O'Hara, Chris; Glazer, Craig; Pincus, Steven; Bryson, Mike E.; Souder, David W.; Tam, Simon K.;

Egan, David M.; michael.regulinski@dominionenergy.com; sharon.l.burr@dominionenergy.com;

Miranda.R.Yost@dominionenergy.com; mohammed.alfayyoumi@dominionenergy.com;

mike.barmer@dominionenergy.com; rick.r.linker@dominionenergy.com;

Katherine.Konieczny@Hq.Doe.Gov; Christopher.Drake@hq.doe.gov; Brian.Mills@hq.doe.gov;

Matthew.Rosenbaum@hq.doe.gov; 'Rakesh.Batra@Hq.Doe.Gov'

Subject: JM/Dominion Yorktown Units 1 and 2 FPA 202(c) Emergency Order Renewal Application

Ouestions

When: Monday, November 27, 2017 5:00 PM-6:00 PM (UTC-05:00) Eastern Time (US & Canada).

Where: Conference Call Participants: (b) (6)

Meeting Access ID: (b) (6)

AUTO DIAL WITH PASSCODE: (b) (6)

Jenny

Pincus, Steven

To:

Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine

Cc:

Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O"Hara,

Chris; Michael Regulinski (Services - 6); casey.roberts@sierraclub.org; Robinson, Evelyn

Subject: Date: Order No. 202-17-4 Renewal Application Filing Wednesday, November 29, 2017 4:13:01 PM

Attachments:

DOE Order 202-17-4 PJM Renewal Application Letter 11-29-17.pdf

Dear Secretary Perry:

PJM respectfully submits for filing a ninety (90) day Renewal Application in accordance with Section 202(c) of the Federal Power Act, the Department of Energy's Rules of Practice and Procedure and Order No. 202-17-4.

Please contact me if you have any questions.

Thank you for your consideration.

Respectfully,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6)

| Steven.Pincus@pim.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403



PJM Interconnection, L.L.C. 2750 Monroe Boulevard Audubon, PA 19403

Steven R. Pincus Associate General Counsel T: (610) 666-4438 I F: (610) 666-8211 steven.pincus@pjrn.com

November 29, 2017

The Honorable James Richard Perry Secretary of the Energy United States Department of Energy 1000 Independence Ave, SW Washington, DC 20585

Re: Order No. 202-17-4 Renewal Application Filing

Dear Secretary Perry:

Pursuant to Section 202(c) of the Federal Power Act ("FPA"), Section 301(b) of the Department of Energy Organization Act, he Department of Energy's ("DOE") Rules of Practice and Procedure and Order No. 202-17-4 issued on September 14, 2017 by the Secretary of Energy ("Secretary") (the "September 14 Order"), PJM Interconnection, L.L.C. ("PJM") respectfully submits a request for a 90-day renewal of the September 14 Order. PJM incorporates by reference PJM's application submitted on June 13, 2017 (the "June 13 Application") and all attachments and appendices thereto, and PJM's August 24, 2017 renewal application (the "August 24 Application") and all attachments and appendices thereto. PJM also incorporates by reference the various reports to DOE concerning the operations and emission data provided by PJM and Virginia Electric and Power Company ("Dominion Energy Virginia") referenced below.

² 42 U.S.C. § § 7101 and 7151(b).

¹ 16 U.S.C. § 824a(c).

³ 16 C.F.R. §§ 205.370, 205.371 and 205.372 and 205.373.

Background

In the June 13 Application, PJM stated the need to request renewals of the Order No. 202-17-2 issued on June 16, 2017 (the "June 16 Order") on a rolling basis until the PJM ordered Regional Transmission Expansion Planning Process ("RTEPP") Skiffes Creek Transmission Project is placed into service, which was at that time anticipated to be completed in 18-20 months once all permits are issued. In the June 16 Order, the Secretary determined "that an emergency exists in the Commonwealth of Virginia due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, and other causes, and that issuance of this Order will meet the emergency and serve the public interest. In doing so, the Secretary directed Dominion Energy Virginia to operate Yorktown Units 1 and 2 as directed by PJM as needed to address reliability issues for the initial 90-day period, June 16, 2017 to September 14, 2017, or any renewal thereof. The Secretary also directed PJM and Dominion Energy Virginia to develop and implement a dispatch methodology and submit it to the DOE upon implementation. The dispatch methodology was submitted by PJM on June 27, 2017.

In the August 24 Application, PJM submitted a request for a 90 day renewal of the June 16 Order. PJM requested an order of the Secretary under Section 202 (c) of the FPA which provides among other things that an emergency continues to exist in the Commonwealth of Virginia due to a shortage of electric energy, a shortage of facilities for the generation of electric

⁴ On October 12, 2017, PJM and Dominion Energy Virginia submitted a report updating the outage schedule for the Skiffes Creek Transmission Project with an extension of the construction schedule of approximately five and one-half months from December 30, 2018 to May 12, 2019.

⁵ June 16 Order page 1.

⁶ June 16 Order page 2.

⁷ June 16 Order page 2.

energy, and other causes, and that issuance of a renewal order (*i.e.* the September 14 Order) will meet the emergency and serve the public interest for another 90 renewal period (i.e. from September 14, 2017 to December 13, 2017).

In the September 14 Order, the Secretary determined "that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy." The Secretary granted PJM's August 24 Application allowing operation of Yorktown Units 1 and 2, with certain modifications, for an additional 90-day period to expire on December 13, 2017. The Secretary's directives required PJM and Dominion to "exhaust all reasonably and practically available resources, including demand response and behind-the-meter generation resources, prior to operating Yorktown Unit 1 and Yorktown Unit 2" consistent with "good utility practices" and in compliance with the dispatch methodology. 10

⁸ September 14 Order page 1

⁹ September 14 Order page 1

September 14 Order page 2, paragraphs A and B. PJM has a detailed registration process as applied to demand response resources which are serving as capacity resources. PJM would utilize that information in applying this provision recognizing that: (i) the amount of registered demand response resources on the peninsula is limited; and (ii) during the renewal period covered by this application, certain demand response resources are available to PJM only in the summer period during the period. PJM has catalogued behind the meter resources based on data provided by the United States Energy Information Administration ("ELA"), Dominion and other sources. Although behind the meter resources are not subject to PJM's direction, PJM works with Dominion to seek their assistance pursuant to the existing dispatch methodology. However, the DOE's directive that PJM and Dominion Energy Virginia exhaust reasonably and practically available demand response and/or behind-the-meter resources applies only if exhausting such resources would lessen the need to operate the Yorktown Units 1 and/or 2 for reliability of the grid consistent with the dispatch methodology, PJM's Governing Agreements and good utility practices. For example, if demand response and/or behind-the-meter resources would not provide needed reactive support, or otherwise not lessen the need to operate the Yorktown units for reliability, such resources would not be "reasonably and practically available" and operating the resources would not be consistent with the dispatch methodology, PJM's Governing Agreements and good utility practices.

The September 14 Order directed PJM and Dominion Energy Virginia to report every two weeks during the term of the September 14 Order all dates on which Yorktown Units 1 and/or 2 are operated and associated air emissions and water usages for those dates. ¹¹ The Secretary also directed reporting in the event the outage schedule or estimates changes from those presented in the August 24 Application. PJM and Dominion Energy Virginia submitted reports on September 28, 2017, August 22, 2017 and November 10, 2017, on the operation of Yorktown Units 1 and/or 2, and a report on October 12, 2017 revising the Skiffs Creek Transmission Project construction schedule and providing associated emission estimates.

The September 14 Order stated that "(i)f the conditions creating the emergency remain substantially unchanged, a renewal request should be submitted at least 14 calendar days before (the September 14 Order) expires." As conditions creating the emergency remain substantially unchanged, this renewal application is due on November 29, 2017.

Renewal Request

As stated in the June 13 Application as revised by the August 24 Application, the Skiffes Creek Transmission Project was expected to be completed and placed into service approximately 18-20 months after receipt of all applicable permits. With issuance of the U.S. Army Corps of Engineers' ("Army Corps") permit on July 3, 2017, Dominion Energy Virginia started construction of the Skiffes Creek project on July 10, 2017. As reported on October 12, 2017, the Skiffs Creek Transmission Project is scheduled to be completed May 12, 2019. Thus, given the continued extended nature of the emergency, PJM respectfully submits that the emergency as set

¹¹ September 14 Order page 2, paragraph C.

¹² September 14 Order page 2, paragraph D.

forth in the June 13 Application and August 24 Application and as determined by the Secretary in the June 16 Order and September 14 continues to exist.

Therefore, PJM respectfully requests that the Secretary grant this renewal application and order the continued operation of Yorktown Units 1 and 2 to alleviate the emergency described in the June 13 Application, the August 24 Application and hereinabove prior to the expiration of the current order (*i.e.* December 13, 2017) under Section 202 (c) of the FPA. PJM request the requested renewal order provide as follows:

- (i) that an emergency continues to exist in the North Hampton Roads area of Virginia due to a shortage of electric energy and a shortage of facilities for the generation and transmission of electric energy and that issuance of a renewal Order will meet the emergency and serve the public interest;
- (ii) from December 13, 2017 to March 13, 2018, Dominion Energy Virginia is directed to operate Yorktown Units 1 and 2 as directed by PJM as needed to maintain grid reliability or for other local area transmission issues;
- (iii) the limitations on operations ensure, to the maximum extent practicable, consistency with applicable laws and regulations, and the reporting requirements for operations and estimated emissions ensure transparency of implementation;
- (iv) consistent with the dispatch methodology submitted by PJM on June 27, 2017, good utility practice and the PJM Tariff, PJM and Dominion Energy Virginia shall exhaust all reasonably and practically available resources including demand response and identified behind-the-meter generation resources to the extent that

Honorable James Richard Perry November 29, 2017 Page 6

such resources address maintenance of grid reliability, prior to operating Yorktown Units 1 and/or 2;¹³

- (v) Dominion Energy Virginia shall continue to follow the dispatch methodology submitted by PJM on June 27, 2017;
- (vi) PJM and Dominion Energy Virginia shall report all dates on which Yorktown Units 1 and/or 2 are operated as well as the estimated emissions and water usage date for those dates within ten (10) business days of such operation; and
- (vii) in the event that the outage schedule or estimates change from those presented in this renewal application, within ten (10) business days PJM and Dominion Energy Virginia shall also provide updated outages schedules and associated Yorktown Units 1 and 2 emission estimates.

Respectfully submitted,

Steven R. Pincus

Associate General Counsel PJM Interconnection, L.L.C.

Steve 2. Pinn

Craig Glazer

VP, Federal Government Policy

PJM Interconnection, L.L.C.

Cc (via electronic mail): Pat Hoffman, U.S. Department of Energy
Catherine Jereza, U.S. Department of Energy
Rakesh Batra, U.S. Department of Energy
Michael C. Regulinski, Dominion Energy Services, Inc.
Casey Roberts, Sierra Club Environmental Law Program

¹³ See Footnote 10.

<u>Jereza, Catherine</u>

To:

Batra, Rakesh; Brian Mills; Rosenbaum, Matthew

Subjects
Date:

FW: OE 202c related by Wed 12/13 Monday, December 11, 2017 7:08:15 PM

Attachments:

Order 202-18-2 as of 12-11.docx

Order 202-18-2 Summary of Findings 12-11.docx

Do we?

From: Konieczny, Katherine < Katherine.Konieczny@Hq.Doe.Gov>

Date: Monday, Dec 11, 2017, 1:40 PM

To: Jereza, Catherine < Catherine. Jereza@Ha.Doe.Gov >, Bittner, Kathy (CONTR)

<<u>Kathy.Bittner@hq.doe.gov</u>>

Cc: Drake, Christopher < Christopher. Drake@hq.doe.gov>

Subject: RE: OE 202c related by Wed 12/13

(b) (5)

----Original Message----

From: Jereza, Catherine

Sent: Monday, December 11, 2017 7:48 AM

To: Lucas, John T.; Dannenfelser, Marty; Doone, Alison; Loraine, Jennifer A.; Turenne, William; Haus, Bob;

Menezes, Mark

Cc: GC Concurrence Actions; Faith, Jayne; Habansky, Sarah; Herron, Vernon; Cunningham, Derrick; Swisher, Vivian P. (CONTR); Hoffman, Patricia; Walker, Bruce; Mills, Brian; Smith, Julie A (OE); Rosenbaum, Matthew; Batra, Rakesh; Konieczny, Katherine; Fibbe, George; Lawrence, Shamika; Bittner, Kathy (CONTR); Fisher, Travis

Subject: OE 202c related by Wed 12/13

(b) (5)

BACKGROUND: Order No. 202-17-4, the Federal Power Act section 202(c) emergency order in effect for PJM and Dominion, ensures reliability in the North Hampton Roads area of Virginia, but it expires on December 13. PJM has requested another 90-day order. By statute, these orders are limited to 90 days in duration, and PJM expects it will need consecutive 202(c) orders through May 2019. In the renewal order, the Department of Energy repeats most of the terms of the current order, mainly requiring that PJM direct the operation of two coal-fired generation units owned by Dominion as needed to address reliability issues. The purpose is to avoid load shedding in the impacted area, which could extend to 150,000 customers including critical infrastructure facilities. This renewal order cross-references a Summary of Findings explaining both the rationale for and legality of the decision to renew Order No. 202-17-4 for another 90 days.

RECOMMENDATION: (b) (5)

Thank you! Katie Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
(o) 202.586.0334
(c) (b) (6)

Shamika Lawrence@hq.doe.gov 202.586.4666

** Please contact Shamika for all meeting and scheduling requests. **

Drake, Christopher

To:

Fickel, Louise; Batra, Rakesh

Cc;

Konieczny, Katherine; Mills, Brian; Rosenbaum, Matthew

Subject:

RE: PJM OE 202c related

Date:

Thursday, December 14, 2017 1:40:33 PM

Three of the documents Rakesh sent (CX, Order 202-18-2, and the Summary of Findings) are in addition to what I sent you earlier today. The fourth document is the same Renewal Application that you posted two weeks ago. Thank you for checking!

Chris Drake

Attorney-Adviser

U.S. Department of Energy, Office of General Counsel

Office of Electricity & Fossil Energy (GC-76)

Forrestal North, Room 6B-256

Tel. 202,586,2919

Christopher.Drake@hq.doe.gov

This communication may contain privileged or confidential material. Potential privileges include, but are not limited to, Attorney-Client, Attorney Work-Product, and Deliberative Process.

From: Fickel, Louise

Sent: Thursday, December 14, 2017 1:38 PM

To: Batra, Rakesh

Cc: Konieczny, Katherine; Mills, Brian; Drake, Christopher; Rosenbaum, Matthew

Subject: RE: PJM OE 202c related

Thanks, Rakesh. Chris sent me four documents (b) (5)

Louise

From: Batra, Rakesh

Sent: Thursday, December 14, 2017 1:36 PM **To:** Fickel, Louise <<u>Louise.Fickel@Hg.Doe.Gov</u>>

Cc: Konieczny, Katherine < Katherine.Konieczny@Hq.Doe.Gov>; Mills, Brian

< Brian.Mills@hq.doe.gov>; Drake, Christopher < Christopher.Drake@hq.doe.gov>; Rosenbaum,

Matthew < Matthew.Rosenbaum@hq.doe.gov>

Subject: PJM OE 202c related

Importance: High

Louise:

Please find attached PJM 202(c) Order No. 202-18-2 related documents for web posting.

Kathy: (b) (5)

Thanks,

Rakesh

Bittner, Kathy (CONTR)

To:

Batra, Rakesh

Cc:

Jereza, Catherine

Subject: Date: 2017-008921 - PJM renewal request Friday, December 01, 2017 2:03:39 PM

Attachments:

2017-008921 - Incoming.pdf

Good afternoon Rakesh,

I wasn't sure if you and Katie have received this correspondence already, but wanted to make sure. (b) (5)

(

Thanks,

Kathy Bittner

Correspondence Specialist

ICF, Contractor for U.S. Department of Energy Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

Johnsen, Steven (MA)

From:

Pincus, Steven <Steven.Pincus@pjm.com>

Sent: To: Wednesday, November 29, 2017 4:13 PM

To: Cc: Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine Michael Regulinski (Services - 6); Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer,

Craig; O'Hara, Chris; Michael Regulinski (Services - 6); casey.roberts@sierraclub.org;

Robinson, Evelyn

Subject:

Order No. 202-17-4 Renewal Application Filing

Attachments:

DOE Order 202-17-4 PJM Renewal Application Letter 11-29-17.pdf

Dear Secretary Perry:

PJM respectfully submits for filing a ninety (90) day Renewal Application in accordance with Section 202(c) of the Federal Power Act, the Department of Energy's Rules of Practice and Procedure and Order No. 202-17-4.

Please contact me if you have any questions.

Thank you for your consideration.

Respectfully,

Steven R. Pincus

Associate General Counsel, Office of General Counsel

(610) 666-4370 | C: (b) (6)

| Steven.Pincus@pim.com

PJM Interconnection | 2750 Monroe Blvd. | Audubon, PA 19403

和CHEE SEPHER

Bittner, Kathy (CONTR)

To:

Jereza, Catherine; Batra, Rakesh

Subject: Date: RE: 2017-008921 - PJM renewal request Friday, December 01, 2017 2:14:43 PM

Thanks Katie.

----Original Message-----From: Jereza, Catherine

Sent: Friday, December 01, 2017 2:14 PM

To: Bittner, Kathy (CONTR) <Kathy.Bittner@hq.doe.gov>; Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>

Subject: RE: 2017-008921 - PJM renewal request

Hi Kathy - The order must be issued on or before December 13, which is a Wed. (b) (5)

Thanks Katie

----Original Message----

From: Bittner, Kathy (CONTR)

Sent: Friday, December 01, 2017 2:04 PM To: Batra, Rakesh <Rakesh.Batra@Hq.Doe.Gov>

Cc: Jereza, Catherine < Catherine. Jereza@Hq. Doe. Gov>

Subject: 2017-008921 - PJM renewal request

Good afternoon Rakesh,

I wasn't sure if you and Katie have received this correspondence already, but wanted to make sure. (b) (5)

Thanks,

Kathy Bittner
Correspondence Specialist
ICF, Contractor for U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability

Phone: (202) 287-5613

Email: kathy.bittner@hq.doe.gov

Michael Regulinski

To:

Secretary Perry; Hoffman, Patricia; Jereza, Catherine; Batra, Rakesh; Konieczny, Katherine

Cc:

Bryson, Mike E.; Souder, David W.; Tam, Simon K.; Glazer, Craig; O"Hara, Chris; casey.roberts@sierraclub.org;

Robinson, Evelyn; Pincus, Steven

Subject:

Order No. 202-17-4 Report on Yorktown Operations

Date:

Friday, December 01, 2017 3:12:42 PM

Attachments:

Attachment 1 Yorktown Hourly Emissions Data VALUES 2015 thru 2017.xlsx

2017-12-01 Dominion Energy letter to Secretary Perry.pdf

Please see attached Yorktown Report requested by DOE staff submitted by PJM Interconnection and Dominion Energy Virginia. Please let me know if you have any questions. Thanks, Mike

Michael C. Regulinski

Managing General Counsel

Dominion Energy Services, Inc.

tieline: 738-2794 P: (804) 819-2794

C: (b) (6)

michael.regulinski@dominionenergy.com

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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

	НЕ (Юлн)	0	0	0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (- •	5 (- (-	0 (0 (o (0	0
	Y HCI (lb/hr)	0	0	0	00	9 6	0	0	0	0	0	0	0	0	0	0	0	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö (0 () (5 (20	5 (o (o (-	0	0
	Mercury (lb/hr)	0	0	0	00	o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö	0	0 1	0 ()	Э (Э (5 (D (D (0 (0	0
	Mercury (lb/TBtu)	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000
	Lead (lb/hr)	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (- ·	0 (5 (.	- •	5 6	o (o (-	0	0
	PM-10 (나/너)	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o (5 (0 (5 (.	.	.	- (o •	5 (Б.	0
	PM-10 (US/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	Coal tons/fir	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.0	900	0.0	0.00	0.00	0.00	0.00	0.00
	nit Operation (minutes)	00:0	0.00	0.00	0.0	8 8	0.00	0.00	0.00	0.00	00'0	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	00.0	0.00	0.00	0.00
	Common Stack Common Stack Common Stack Unit Operation \$502 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0	0.0	0.0	0:0	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ommon Stack C SO2 (Lb/Hr) C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	2 6	0.0	0.0	0.0 0.0	0.0 0.0	0.0	0.0	0.0
	Soz Soz (Lb/mm8tu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000
	Common Stack NOx Lb/Hr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	9 6	0.0	0.0	0.0	0 (0.0
	Common Stack Common Stack NOx Lb/mmBtu NOx Lb/Hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000
	Common Slack Heat Input (mmBtu)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	0.0	0.0	0 6	9.6	0.0	0.0	0.0	0.0	0.0
	YT02 Gross C Load MW Value	0	0	0	0 0		0	0	0	0	0	0	0 (0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (5	0 (- ·	- (-	0 0	o (.		- ·	- (-	- ·	∍
ŀ	YT01 Gross Load MW Value	o	0	0	0 6		0	0	0	0	0	0	0 (0	0 '	0 (0 +	D .	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0 (0	0 (o (- (0 (0 0	.	0	0 0	o (-	0	o (5
	Date/Hour	01-01-2015 00			01-01-2015 03			01-01-2015 07	01-01-2015 08	01-01-2015 09	01-01-2015 10																				01-02-2015 06	01-02-2015 07				01-02-2015 11		01-02-2015 13			01-07-7015 18				07 CT07-70-T0	77 5107-70-10	01-02-2015 22
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)	0	0	0	0 (5 (0	0			0	0 (, .	, 0	U	J	U		J			_			٠, ر			,			Ü	J	_	_	_	_							_
HCI (lb/hr)	0	0	0	0 (5 6	0 0	0	0	0	0	0	0 0	o c	0 0	0	0	0	0	0	0	0	0	0	0	0 (o (0 (0 (5 C	0 0		0	0	0	0	0	0	0	0 '	0 '	0 '	۰ ۰	0 (2
Mercury (lb/hr)	0	0	0	0 (> 0	0 0	0	0	0	0	0	0 0	.	9 6	0	0	0	0	0	0	0	0	0	0	0 (Э (0 (0 0	5 C	0 0	0	0	0	0	0	0	0	0	0 (0 (0 (0 (0 (2
Mercury (lb/TBtu)	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Lead (lb/hr)	0	0	0	0 (э с		0	0	0	0	0	0 0	- 0	o c	0	0	0	0	0	0	0	0	0	0	0 (Э (0 (0 (5 C	9 6	0	0	0	0	0	0	0	0	0 (0 (0 (0 (0 (>
PM-10 (Lb/Hr)	0	0	0	0 (5	0 0	0	0	0	0	0	0 (> 0	o c	0	0	0	0	0	0	0	0	0	0	0 (Э (0 (0 (5 6	0 0	0	0	0	0	0	0	0	0	0 (0 (0 (0 (0 (>
PM-10 (lb/mm8tu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	0:00	0.00	0.00	0.00	0.00	000	0.0	0.00	0.00	0.00	0.00	0.0	0.00	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.0	0.00	0.00	9.6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1 1	0.00	0.00	00'0	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	8 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	90.0	0.00	0.00	90.0	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mon Stack Unit	0.0	0.0	0.0	0.0	2 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	3 6	90	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0.0
Common Stack Common Stack Common Stack Unit Operation 802 (LbH1) C02 (TonsH1) (minutes)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	D 6	3 6	9	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SO2 SO2 SO2 SO2 SO3	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.000	0.0000	0.000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Non Stack Comi	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	3 6	9 0	0:0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack NOx Lb/mmBtu NOx Lb/Hr	0.0000	0.0000	0.000.0	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.000	0000	0,000	0.000	0.0000	0.000.0	0,000	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
n Stack Comi	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	2 0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0
YT02 Gross Common Slack Load MW Heat Input (mmBtu)	0	0	0	0 (5 ()	. 0	0	0	0	0	0 (5 6	.		0	0	0	0	0	0	0	0	0	0 (0	0	0 (0 (,	. 0	0	0	0	0	0	0	0	0	0	0	0	0	5
	-	_	_	_		5 C	. ~	. ~	_	_		<u> </u>	-		. ~			_	_	_	•	c	_		C -		<u>.</u>	c .	p ′		. ~	Ć		c		c		0	е.	o ·	o ·	o ·	ο.	0
YT01 Gross Load MW Value	0		ی	، ن		J C	. 0	J	u	J	J	<u> </u>	، ر			ی .	J	J	J	J	•	J	J	_	<u> </u>		_ '	<u> </u>	_ (<i>-</i> -		J	J	_	•)	_	_					_ '	_
Date/Hour	01-02-2015 23					01-03-2015 04								01-03-2015			01-03-2015 17	01-03-2015 18	01-03-2015 19	01-03-2015 20	01-03-2015 21	01-03-2015 22								01-04-2015 06	01-04-2015 08	01-04-2015 09	01-04-2015 10	01-04-2015 11	01-04-2015 12	01-04-2015 13								01-04-2015 21

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)																				0.000598			_	0.990837			0.987849		0		1.06/928			1.246614						- -		
HCI (Ib/hr)	0	0	0	0 (90	9 6	, 0	0	0	0	0	0	00	.	o c	. 0	0	0	0	0.004781	0.702789	0.721912	3.011952	7.926693	8.07012	8.01753	7.902789	7.826295	7.816733	8.61992	8.543426	9.657371	9.614343	9.972908	10.82869	19.90279	31.04701	46.85737	77.85179		7/07/811	135,4948
Mercury (1b/hr)	0	0	0	0 (0 0	o c	0	0	0	0	0	0	0 0	5 6	0 0	0	0	0	0	3.31E-07	4.86E-05	4.99E-05	0.000208	0.000548	0.000558	0.000555	0.000547	0.000541	0.000541	0.000596	0.0000591	0.000668	0.000665	0.00069	0.000749	0.001377	0.002147	0.003241	0.005385	0.007527	0.0081/6	0.009372
Mercury (lb/TBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0.000	0.0000	0.0000	0.0000	0.000	3.3068	3.3068	3,3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068
Lead (lb/hr)	0	0	0	o (9 0	o c	0	0	0	0	0	0	0 (- 0	o c	0	0	0	0	1.67E-06	0.000246	0.000253	0.001054	0.002774	0.002825	0.002806	0.002766	0.002739	0.002736	0.003017	0.00299	0.00338	0.003365	0.003491	0.00379	0.006966	0.010866	0.0164	0.027248	0.038088	0.0413/3	0.047423
РМ-10 (LЪ/Hr)	0	0	0	0 (9 0	.	. 0	0	0	0	0	0	0 0	-	5 C	0	0	0	0	0.01255	1.84485	1.89505	7.9065	20.8079	21.1844	21.04635	20.74515	20.54435	20.51925	22.62765	22,42685	25.01213	25.23805	26.1793	28.42575	52.24565	81.4997	123.0026	204.3642	285.6631	310.2988	355.6796
PM-10 ((b/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	U.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr ((0.00	0.00	0.00	0:00	0.00	00.00	000	0.00	0.00	0.00	0.00	0.00	0.00	000	8 6	900	000	0.00	0.00	0.00	0.59	0.60	2.51	5.61	6.73	6.68	6.59	6.52	6.51	7.18	7.12	8.05	8.01	8.31	9.05	16.59	25.87	39.05	64.88	90.69	98.51	112.91
	0.00	0.00	0.00	0.00	0.00	9 6	800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	800	00'0	0.00	0.00	0.10	1.00	1.00	1.00	9 5	8 6	1.0	1.00	1.00	1.00	1.00	8 5	8 6	1.00	1.00	1.00	1.00	1.00	1,00	1.00	0.1	8 .	8 6
S Carro	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	o o	0.0	9 6	900	0.0	0.0	0.0	0.0	1.5	1.6	6.5	ó.	i u	! "?	ó	αć	16.8	νì	18.3	ù r	. 36	4	7	۲.	9.99	9	<u>-</u> :	ις I	· ·	ŋœ
Common State	Ö	Ö	Ó	o ·	o o	o c	o c	6 6	Ö	Ö	Ö	o	o o	5 6	5 C	o C	· c		o	Ö				17.0											23,2							290.8
SO2 (Lb/Hr)	0.0	0:0	0.0	0.0	0.0	0 0	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	2 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	7.0	6.4	5.4	5.9	6.9	ού ο 20	y o		15.6	18.2	309.9	801.0	1785.9	3158.8	4730.9	5141.4	5689.1
Common Stack Common Stack Unit Operation S02 (Lb.Hd) CO2 (Tons/Hd) (minutes)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0351	0.0417	0.0387	0.0330	0.0361	0.0383	0.0325	0.0472	0.0597	0.0748	0.0804	0.7444	1.2334	1.8222	1.9398	2.0784	2.0794	2.0074
mon Stack Ox Lb/Hr	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6		8.0	0.0	0.0	0.0	0.0	0:0	0.0	0.4	4. n	6.0	6.7	6.9	6.9	7.0	8.8	8.6	10.4	199.7	10.6	12.5	89.9	173,4	333.2	731.2	1003.8	1139.8	1408.5
Common Stack Com NOx Lo/mmBtul N	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0063	0.0247	0.0327	0.0400	0.0417	0.0422	0.0428	0.0488	0.0481	0.0520	0.9930	0.0508	0.0552	0.2160	0.2670	0.3400	0.4490	0.4410	0.4610	0.4960
Common Stack Co Hear Input (mm8tu)	0.0	0.0	0.0	0.0	0.6	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 0	0.0	0.0	10	14.7	15.1	63.0	165.8	168.8	167.7	165.3	163.7	163.5	180.3	178.7	202.5		208.6	226.5	416.3	649.4	980.1	1628.4	2276.2	2472.5	2834.1
	0	0	0	0	0 (0 0		0	0	0	0	0	0 (5 (5 0	,		. 0	0	0	н	0	0	0 0	o c	0	0	0	0	0	0 0	5 C	, 0	0	0	16	99	8	118	146	166	15,
YT02 Gross Load MW Value																																										
YT01 Gross Load MW Value	0	0	0	0	0 (0 0	9 6		0	0	0	0	0	0 (5 C	9 6	• •	. 0	0	0	н	0	0	0 0			0	0	0	0	0 0	o c	0	0	0	0	0	0	31	92	99	EE 25
Oate/Hour	01-04-2015 22					01-05-2015 03				01-05-2015 08	01-05-2015 09				01-05-2015 13	01-05-2015 14 01-05-2015 15	01-05-2015 16				01-05-2015 20				01-06-2015 00			01-06-2015 04	01-06-2015 05			01-06-2015 08			01-06-2015 12	01-06-2015 13	01-06-2015 14	01-06-2015 15				01-06-2015 19 01-06-2015 20
Barra Carra	8	6	0.	6	ö	0 6	öö	6	ö	ö	. <u>o</u>	ö	ö	0	o c	oc	Ċ	Ö	ö	0 30		Ö	O	o ò	oć	9 6	6	Ö	0	o	0	o c		on .	0	0	0	0	0	0	0 6	

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

8 8 8	YT02 Gross Common Stack Load MW Heat Input Yalue (mm8tu)	n Stack Common hipur Nox Lb	Common Stack Common Stack NOx Lb/mmBtu NOx Lb/Hr	nmon Stack Go	SOZ Lb/mmBril	Common Stack Common Stack Common Stack Unit Operation SO2 SO2 (LbH) CO2 (Tonshri) (minutes) (LbmmBtal SO2 (LbH) CO2 (Tonshri) (minutes)	common Stack to	Unit Operation (minutes)	Coal tons/hr	PM-10 ((b/mm8tu)						HF (lb/hr)
129 2176.1 (103 1896.0 (0.5410	1177.3 915.8	1.9878	4325.7 3726.7	223.3 194.5	9 7	86.70 75.54	0.1255	273.1006	0.036413	3.3068	0.007196	104.036 / 90.64542	13.00458
1859.4		ò	0.4730	879.5	1.8824	3500.2	190.8	1.00	74.08	0.1255	233,3547	0.031113	3.3068	0.006149	88.89562	11.11195
109 1979.4 0.4540 107 1974.8 0.4570		9.4	8 F	898.6	1.8287	3619.8	203.1	1.00	78.86	0.1255	248.4147 247.8374	0.033121	3.3068	0.006545	94.63267 94.41275	11.82508
1936.2		0.46	6	898.4	1.7451	3378.8	198.7	1.00	77.14	0.1255	242.9931	0.032399	3.3068	0.006403	92.56733	11.57092
		4	9 9	909.7	1.7334	3551.5	210.2	9 5	81.63	0.1255	257.137	0.034284	3.3068	0.006775	110 6629	12.24442
130 2314./ 0.4630 155 2669.3 0.5150		0.463		1374.7	1.8052	4006.0	273.9	1.00	106.35	0.1255	•	0.044666	3.3068	0.008827	127.6159	15.95199
2829.0		0.5070		1434.3	1.8233	5158.1	290.3	1.00	112.71	0.1255		_	3.3068	0.009355	135.251	16.90637
3006.6		0.5110	_	1536.4	1.8329	5510.9	308.5	1.00	119.78	0.1255	. ,	0.05031	3.3068	0.009942	143.7418	17.96773
3018.2		0.5190	_	1566.4	1.8399	5553.1	309.7	9.1	120.25	0.1255		0.050504	3.3068	0.009981	144.2964	18.03705
172 3015.3 0.5230		0.5230		0.//21	1.8396	5546.8	309.4 4.00.0	9.1	119 95	0.1255	372.854	_	3.3058	0.009956	143.9476	17.99283
3010.8 3011.3		0.5240		1553.8	1.8154	5466.7	309.0	1.00	119.97	0.1255		0	3.3068	0.009958	143.9665	17.99582
3032.3		0.5150		1561.6	1.7895	5426.3	311.1	1.00	120.81	0.1255	380.5537	0.05074	3.3068	0.010027	144.9705	18.12131
3039.7		0.5160		1568.5	1.7723	5387.3	311.9	1.00	121.10		,	O	3,3068	0.010052	145.3243	18.16554
		0.5190		1575.9	1.7696	5373.3	311.5	1.00	120.98		.,,	0.05081	3.3068	0.010041	145.1713	18.14641
3028.2		0.5210		1577.7	1.7883	5415.2	310.7	1.00	120.65	0.1255	(1)	_	3.3068	0.010014	144.7745	18.09681
3028.9		0.5200		1575.0	1.8036	5463.0	310.8	1.00	120.67			0	3.3068	0.010016	144.808	18.101
3033.5		0.5210		1580.5	1.7530	5317.6	311.2	1.00	120.86			0.05076	3.3068	0.010031	145.0279	18.12849
3017.6		0.5150		1554.1	1./394	5248.8	309.6	3 5	120.22	0.1255			90000	E/6600.0	144.2077	10,00347
172 3017.2 0.5130		0.5130		1547.8	1,7352	5235.4	310.1	1.00	120.43	0.1255	379.3489		3,3068	0.009995	144.5116	18.06394
3015.7		0.4970		1498.8	1.6733	5046.1	309.4	1.00	120.15				3,3068	0.009972	144.1769	18.02211
2706.1		0.5070		1372.0	1.6619	4497.3	277.6	1.00	107.81		•••		3.3068	0.008948	129.3753	16.17191
2452.4		0.5060		1240.9	1.6490	4044.1	251.6	1.00	97.71		•••	0	3.3068	0.00811	117.2462	14.65578
2434.7		0.5100		1241.7	1.6447	4004.3	249.8	1.00	97.00				3.3068	0.008051	116.4	14.55
2413.0		0.5140		1240.3	1.6453	3970.1	247.6	8 6	96.14	0.1255	302.8315	0.040377	3.3068	0.007979	115.3625	14.42032
172 2432.6 U.S.1U		0.5210		126/.4	1.6321	2.0765	248.5	3 5	76.02 26.02		.,	-	3.3068	0.007997	115,6159	14.45199
2450.8		0.5220		1279.3	1.6381	4014.6	251.5	1.00	97.64				3.3068	0.008104	117.1697	14.64622
2460.3		0.4890		1203.1	1.6239	3995.3	252.4	1.00	98.02				3.3068	0.008136	117.6239	14.70299
174 2837.2 0.4940		0.4940		1401.6	1.7074	4844.2	291.1	1.00	113.04		•••	_	3.3068	0.009382	135.643	16.95538
3039.6		0.5020	_	1525.9	1.8038	5482.9	311.9	1.00	121.10		•••	_	3.3068	0.010051	145.3195	18.16494
2083.2		0.522(_	1087.4	1.7969	3743.4	213.7	1.00	83.00			-	3.3068	0.006889	77504 55	12.4454
1495.2		0.548		819.4	1.7857	2670.0	153.4	8 6		0.1255	18/.64/6	0.025019	3.3058	0.004944	72 1007	8.535458
1508.1		0.540	n (814.4	1.7/14	26/1.5	154.7	F.00					90000	0.004507	71 69402	9 061753
1499.6		0.547	<u> </u>	820.3	1.7663	2648.7	153.9	DO:I	59.75				00000	0.004939	77 57971	0.301/33
		0.534	2 9	832.7	1.58/8	2651.8	167.4	00.1	21.28 83.06	0.1255	108 6789		3.3008	0.00030	75,66693	9.458367
1382.7		֓֞֜֜֜֜֜֜֜֜֜֜֜֜֜֓֓֓֓֜֜֜֜֜֜֜֓֓֓֓֜֜֜֜֜֜֜֜֜	2 9	2.040.4	1.0200	2303.0	102.4	9 6	00.00		, ,		2000	0.006677	95 54024	12 06753
2019.3			0.5140	1105/3	1 0753	1504.	4.102	9 6	00.40		٠	_	3.3068	0.00815	117.8343	14.72928
2464.7			06/1	1100.0	1.0/32	4621.7	6.755	9 6	02.00		,	_	3 306.6	700709	1717 711	14 33964
152 2399,5 0,4		2 0	0.4870	1446.2	1,8846	4522.2 5417.4	7.047	9 5	•			_	3.3068	0.009636	139.31	17.41375
C.C.1.C.2		9 6	3 6	1457.0	1 2170	20202	306.5	6					3.3068	0.009878	142.8143	17.85179
		240	ຂຸຂ	1457.6	1.7907	5349.2	306.5	1.00				_	3.3068	0.009878	142.8143	17.85179
7:1967		9	_	3, 11	F: (1	2	ì							i i	i

(aug)	17.82371	17.77649	17.73287	15.5008	5.04183	14.90/9/	3005	4.36175	3.47371	13.41813	16.08825	7.97251	18.2/0/2	25025.01	5.81813	5.35916	13.46116	13.22211	13.03327	14.06713	17.18606	18.00657	17.79801	16.46175	17.38327	5.66665 15.0759	4.86375	5.36036	14.67371	15.3006	16.87829	(6.71633	17.57151	1,73944	17.96853	8.00179	7.88884	(4.95159	14.34323	12.42968	11.78904	13.52749	17.53805	17.70299
HF (lb/hr)	,,	•	Н	,			_ '	Ξ,		` '				•			٠.	٠.		•	•	• •				-		_			٠.							٠,,,	• • •	•	.,	• •	٠.	•
HCI (Ib/hr)	142.5896	142.212	141.8629	124.0064	120.3547	119.2637	113.550	114.894	107.7896	107.345	128.706	143.7801	146.1657	146.3614	126.545	122.8733	107.6892	105.7769	104.2661	112.5371	137.4884	144.0526	142.3841	131.694	139.0651	120 5072	118.91	122.8829	117.3896	122.4048	135.0263	133.7307	140.5721	141.9155	143./466	144.0143	143.1108	119.6127	114.7458	99.43745	94.31235	108.2199	140,3044	141.6239
Mercury (Ib/hr)	0.009862	0.009836	0.009812	0.008577	0.008323	0.008249	0.007855	0.007947	0.007455	0.007425	0.008902	0.009945	0.01011	0.010100	0.008753	0.008499	0.007449	0.007316	0.007212	0.007784	0.00951	0.009964	0.009848	0.009109	0.009619	0.008792	0.008225	0.008499	0.008119	0.008466	0.009339	0.00925	0.009723	0.009819	0.009942	0.009961	868600.0	0.008273	0.007937	0.006878	0.006523	0.007485	0.009704	0.009796
Mercury Mercury (Ib/TBtu) (Ib/hr)	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3058	3.3068	3.3068	3.3068	3.3068	3.3068	3,3068	2,5006	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3,3068	3.3068	3.3068	3.3068	3.3068	3.3058	3.3068	3.3068	3,3068	3.3068	3.3068	3.3068	3.3068	3,3058	3.3068	3006	3305.4	3.3068	3.3068	3.3068	3,3068	3.3068	3.3068	3.3068
Lead (lb/hr)	0.049906	0.049774	0.049652	0.043402	0.04211/	0.041742	0.039/45	0.040213	0.037726	0.037571	0.045047	0.050323	0.051158	0.051299	0.044291	0.043006	0.037691	0.037022	0.036493	0.039388	0.048121	0.050418	0.049834	0.046093	0.048673	0.044488	0.042213	0.043009	0.041086	0.042842	0.047259	0.046806	0.0492	0.04967	0.050311	0.050313	0.050089	0.041864	0.040161	0.034803	0.033009	0.037877	0.049107	0.049568
PM-10 (Lb/Hr)	374.3038	373.3123	372.3962	325,5219	315.8835	313.0723	298.1002	301.6016	282.9523	281.7852	337.8586	377.4287	383.6912	384.7454	332.186	322.5476	282.6888	277.6688	273.703	295.4145	360.9129	378.1441	373.7641	345.7023	365.0544	216 6000	312,1436	322.5727	308.1527	321.3177	354.4497	351.0486	369.0077	372.5342	377.3409	378 0437	275 6717	313.9885	301.2126	261.0275	247.5739	284.0818	368.3049	371,7687
PM-10 ((b/mmBu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coat tons/hr	118.82	118.51	118.22	103.34	100.28	99.39	94.63	95.75	89.82	89.45	107.25	119.82	121.80	177.00	105.45	102.39	89.74	88.15	86.89	93.78	114.57	120.04	118.65	109.75	115.89	100.5	10.001	102.40	97.82	102.00	112.52	111.44	117.14	118.25	119.79	120.01	110.01	99.68	95.62	82.86	78.59	90.18	116.92	118.02
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	9 5	3 5	100	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	9 9	9.5	3 5	100	1.00	1.00	1.00	1.00	1.00	95	9 5	9 6	9 5	8 7	1.00	1.00	1.00	1.00	1.00	1.00
ion Stack Unit (Tons/Hr) (m	306.0	305.2	304.4	266.1	258.2	255.9	243.7	246.6	231.3	230.4	276.2	308.6	313.7	314.5	313.5	263.7	231.1	227.0	223.8	241.5	295.1	309.1	302.6	282.6	298.4	277.8	255.7	263.7	251.9	262.7	289.8	287.0	301.7	304.6	308.5	308.5 5.00 t	1.506	256.7	246.3	213.4	202.4	232.2	301.1	303.9
Common Stack Common Stack Common Stack Common Stack Unit Operation Nox Lbfm Buj NOX Lbfm (Lbfm) CO2 (Tons/H) (minutes)	5247.1	5133.5	5041.4	4385.8	4233.4	4138.9	3901.4	3954.6	3703.0	3660.6	4425.8	4942.4	5003.9	5052.8	4385.0	4265.6	3729.8	3657.4	3636.3	3899.6	4819.7	5081.4	5031.3	4625.5	4909.0	44/2.6	4248.1	4342.4	4160.0	4319.1	4761.3	4654.5	4920.8	4953.8	5042.5	50503	5030.3	4204.9	4027.1	3463.5	3293.2	3845.4	4985.3	5009.3
soz SOZ SommBtul	1.7593	1.7258	1.6990	1.6909	1.6819	1.6591	1.6425	1.6456	1.6424	1.6303	1.6440	1.6434	1.6367	1.6416	1.0457	1.6597	1.6558	1.6531	1.6673	1.6567	1.6760	1.6864	1.6894	1.6792	1.6876	1.6823	1.5839	1.6895	1.6942	1.6870	1.6858	1.6640	1.6736	1.6688	1.6771	1.6//4	1.0700	1.6807	1.6779	1.6652	1.6694	1.6988	1.6987	1.6910
Ox Lb/Hr (L	1461.4	1472.4	1474.7	1385.1	1359.2	1364.5	1334.9	1336.2	1343.7	1295.5	1397.2	1479.6	1488.9	151/.5	1735.0	13519	1329.0	1312.0	1321.6	1339.4	1455.2	1491.5	1465.3	1336.0	1373.0	1254.9	1291.6	1300.6	1252.3	1285.3	1369.8	1328.7	1408.4	1436.7	1449.2	1458.3	14/0.0	1323.5	1339.3	1225.1	1106.7	1249.5	1440.9	1410.1
mon Stack Con Lb/mmBtu N	0.4900	0.4950	0.4970	0.5340	0.5400	0.5470	0.5620	0.5560	0.5960	0.5770	0.5190	0.4920	0.4870	0.4950	0.5020	0.5370	0.5900	0.5930	0.6060	0.5690	0.5060	0.4950	0.4920	0.4850	0.4720	0.4720	0.5120	0.5060	0.5100	0.5020	0.4850	0.4750	0.4790	0.4840	0.4820	0.4850	0.4600	0.5290	0.5580	0.5890	0.5610	0.5520	0.4910	0.4760
Common Stack Com Heat Input NOx (mmBtu)	7987.5	2974.6	2967.3	2593.8	2517.0	2494.6	2375.3	2403.2	2254.6	2245.3	2692.1	3007.4	3057.3	3065.7	3676.0	25701	2252.5	2212.5	2180.9	2353.9	2875.8	3013.1	2978.2	2754.6	2908.8	2658.7	77877	2570.3	2455.4	2560.3	2824.3	2797.2	2940.3	2968.4	3006.7	3006.9	50,74.3	2501.4	2400.1	2079.9	1972.7	2263.6	2934.7	2962.3
YT02 Gross Com Load MW: He Value fr	174	175	173	147	147	145	142	140	136	135	154	175	176	176	ζ, <u>†</u>	147	121	119	118	128	161	169	168	151	166	148	145	148	141	145	160	157	168	169	175	175	7 7	147	139	116	109	128	167	169
YT01 Gross YT0 Load MW Los Velue V	2,5	153	154	142	131	130	117	123	111	109	140	156	160	161	143	134	117	117	117	122	149	156	153	145	149	141	12/	130	124	132	147	145	153	154	155	155	156	1 1 2 2 3 3 4 5 5 5 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	123	108	102	115	151	154
VT(Date/Hour Lo	01-08-2015 20	01-08-2015 21	01-08-2015 22							01-09-2015 05		01-09-2015 07			01-09-2015 10					01-09-2015 15	01-09-2015 17	01-09-2015 18	01-09-2015 19	01-09-2015 20	01-09-2015 21		01-09-2015 23			01-10-2015 03	01-10-2015 04	01-10-2015 05			_		01-10-2015	01-10-2015 11				01-10-2015 16	01-10-2015 17	01-10-2015 18

Ē	266	745	789	594 745	333	338	502	806	195	386	241	817	n (0 6	1 6	678	2 6	9 6	107	50.4	1 2	<u>უ</u>	2 2	ָ הַ הַ	9 6	284	6	2 2	150	000	11 2004	145	į į	225	1 6	8 6	968	1785	689	16.7504	15.56713	3558	13.99303	9681	3801
HF (lb/ht)	•		• • •	18.11594			18.04602	''	•	-			18.34363			22825.21													11.72351		-1	•	• •					•	•		٠,	•		5 14.79681	15.99801
HCI (lb/hr)	141.4853	141.4996	141.4231	144.92/5	133,7307	143.6319	144.3681	145.0327	145.2956	143.8709	143.3928	146.0653	146.749	C/C7:04T	128./8/3	100.2263	000/0.40	71.4247	240/5.26 900/5.56	93./2908	יייייייייייייייייייייייייייייייייייייי	132./458	135.0884	/6/7777	90.28685	115.1665	6759979	93.10279	93.78645	90.63108	90.28685	•	00.000	112 7618	147 1307	142 6231	141.6717	٠.		134,0032	124,5371	110.8446	111.9442	118.3745	127.9841
Mercury (lb/hr)	0.009786	0.009787	0.009782	0.010024	0.00925	0.009935	0.009985	0.010031	0.01005	0.009951	0.009918	0.010103	0.01015	0.01010.0	0.008908	0.005932	0.00000	0.00b324	0.000431	0.006483	0.00004	781600.0	0.009344	0.00/69/	0.005245	0.00/956	0.006/55	0.00644	0.006487	U.UUBZB9	0.006245	0,00000	0.0002±0	0.00000	0.0000	0.00001	0.009799	0.009594	0.009228	0.009269	0.008614	0.007667	0.007743	0.008188	0.008852
Mercury (lb/TBtu)	3.3068	3.3068	3.3068	3.3068	33068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3058	3.3068	3.3058	0.000	3.3058	3.5008	3.3058	00000	3.3058	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3058	3.3068	000000	2,2000	3000	3.305.8	3 3068	3.3068	3.3068	3.3068	3.3068	3,3068	3.3068	3.3068	3.3068	3.3068
Lead (lb/hr)	0.04952	0.049525	0.049498	0.050725	0.046203	0.050271	0.050529	0.050761	0.050853	0.050355	0.050187	0.051123	0.051362	0.051185	0.0450/6	0.035079	7767500	0.031999	0.032542	0.032805	0.034019	0.045461	0.04/281	0.038948	0.0316	0.040308	0.034182	0.032586	0.032825	0.031/21	0.0316	TOCTOO O	0.021400	0.035467	704650.0	04/04/00	0.049585	0.048546	0.046695	0.046901	0.043588	0.038796	0.03918	0.041431	0.044794
PM-10 (Lb/H1)	371.4047	371.4424	371.2416	380.4407	351.3324	377.0397	378.9724	380.7168	381.4071	377.6672	376.4122	383.4276	385.2223	383.8/94	338.0/19	263.0982	240,9389	239.9937	244.0724	245.0428	/40.667	348.4633	354.6128	292.1138	237.0068	302.317	256.3714	244.3987	246.1934	23/.9104	237.0068	1217.562	2066,002	C4 /0. / C2	272.0045	277.2016	371.8942	364.1006	350.2203	351.764	326.915	290.9718	293.8583	310.738	335.9635
PM-10 (lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1253	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1233	0.1253	0.1250	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	117.90	117.92	117.85	120.77	114.92	119.69	120.31	120.86	121.08	119.89	119.49	121.72	122.29	121.86	107.32	83.52	78.40	76.19	//.48	78.11	82.43	110.62	112.57	92.73	75.24	95.97	81.39	77.59	78.16	75.53	75.24	/4.5/	74.92	, 4, 40 C C C C C C C C C C C C C C C C C C C	15.00	110.4	118.06	115.59	111.18	111.67	103.78	92.37	93.29	98.65	106.65
	1.00	1.00	1.00	1.00	9.5	700	1.00	1.00	1.00	1.00	1.00	1.00	1.00	00.1	1.00	1.00	1.00	1.00	1.00	9:5	1.00	1.00	1.00	1.00	1.00	1.0	7.0	1.0	1.00	1.0	9 9	3 5	9.7	9 5	007	3 5	8 6	1.00	1.00	100	9	100	8 6	1.00	1.00
mmon Stack Un 2 (Tons/Ht)	303.6	303.7	303.5	311.0	5.05. 5.05.	308.2	309.8	311.2	311.8	308.8	307.7	313.5	314.9	313.8	276.4	215.1	201.9	196.2	199.5	201.2	217.3	284.9	289.9	238.8	193.8	247.2	209.6	199.8	201.3	194.5	193.8	192.3	192.9	5.451	242.0	303.0	304.0	7 297	2863	287.6	2673	237.9	240.2	254.0	274.7
Common Stack Common Stack Common Stack Unit Operation 802 (10-14) CO2 (Tons-14) (finituses)	5010.5	5040.0	5055.6	5190.5	4955.b	5198.7	5249.2	5242.2	5240.2	5209.0	5212.0	5308.9	5351.5	5335.6	4662.9	3585.8	3334.6	3231,2	3288.7	3332.9	3536.0	4822.7	4909.7	3993.9	3221.9	4150.6	3523.9	3365.0	3415.3	3304.2	3288.6	32/4.2	37/7:6	3259.1	4120.3	51/2.3	7150.7	5018.5	4866.8	4890.7	4549.5	4063.3	4107.2	4321.6	4690.8
SO2 SO2 (Lb/mmBtu)	1.6931	1.7029	1.7091	1.7122	1./215	1.7304	1.7383	1.7280	1.7243	1.7310	1.7377	1.7377	1.7434	1.7443	1.7310	1.7105	1.6946	1.6897	1.6910	1.7000	1,7091	1.7369	1.7376	1.7159	1,7061	1.7230	1.7250	1.7279	1.7410	1.7430	1.7414	1.7470	1.7404	1.7209	1./469	1.7398	17413	17208	1 7440	1 7449	1 7465	1 7576	1.7541	1.7454	1.7523
Common Stack Common Stack Common Stack SOZ NOx Lb/Hr (Lb/mmBu)	1408.7	1397.0	1414.0	1427.8	1318.2	1357.9	1374.0	1383.3	1388.9	1378.3	1379.7	1381.0	1399.7	1407.0	1266.1	1148.8	1074,4	1042.2	1034.6	1015.5	1057.2	1357.8	1381.7	1261.6	1008.5	1252.6	1158.3	940.6	933.8	911.8	891.4	894.0	876.3	8/1.1	5.5/01	1441.9	1.5551	1317.1	1.780	1292.7	1202.1	1205.6	1243.3	1247.9	1287.6
mmon Stack Co	0.4760	0.4720	0.4780	0.4710	0.45/0	0.4520	0.4550	0.4560	0.4570	0.4580	0.4600	0.4520	0.4560	0.4600	0.4700	0.5480	0.5460	0.5450	0.5320	0.5180	0.5110	0.4890	0.4890	0.5420	0.5340	0.5200	0.5670	0.4830	0.4760	0.4810	0.4720	0.4770	0.4660	0.4600	0.4560	0.4850	0.4690	0.4050	0.450	0.4510	0.450	0.4020	0.5310	0.5040	0.4810
Common Stack Co Heat Input (mm8tu)	2959.4	2959.7	2958.1	3031.4	2884.4	3,7672	3019.7	3033.6	3039.1	3009.3	2999.3	3055.2	3069.5	3058.8	2693.8	2096.4	1967.8	1912.3	1944.8	1960.5	2068.9	2776.6	2825.6	2327.6	1888.5	2408.9	2042.8	1947.4	1961.7	1895.7	1888.5	1874.2	1880.4	1893.8	2358.6	2972.9	7.5857	2903.3	2.1052	27.30.0	2604.9	2212 E	2341.5	2476.0	2677.0
YT02 Gross Co Load MW Value	169	169	169	173	167	3 F	175	175	175	174	173	174	175	175	152	118	108	104	104	105	112	159	161	129	104	136	114	106	109	102	100	66	9	8 9	130	168	169	166	100	į	120	120	129	138	150
YT01 Gross Y Load MW I	154	154	154	159	148	152	G	160	160	160	150	160	161	160	145	109	101	66	101	102	106	141	148	122	101	122	106	102	100	100	66	86	66	66	121	ES	53	104	1 - F	94.	1 t	13,	122 123	129	138
Date/Hour	01-10-2015 19		01-10-2015 21	01-10-2015 22		01-11-2015 00				01-11-2015 05	01-11-2015 06	01-11-2015 07	01-11-2015 08		01-11-2015 10		01-11-2015 12	01-11-2015 13		01-11-2015 15	01-11-2015 16	01-11-2015 17	01-11-2015 18	01-11-2015 19	01-11-2015 20	01-11-2015 21	01-11-2015 22	01-11-2015 23	01-12-2015 00	01-12-2015 01	01-12-2015 02	01-12-2015 03				01-12-2015 07	01-12-2015 08	01-12-2015 09	01-12-2015 10	01 13 2015 11		01 21 27 20 27	01-12-2015 14	01-12-2015 16	01-12-2015 17

	9	60	22	31	98	81	92	37	92	46	28	80	93	ខ្ល	45	45	<u>چ</u>	4	34	55	48	63	46	49	47	9	8	42	94	98	72	8	23	43	4 :	? :	8 9	n :	49	F (<u>م</u> ا	<u> </u>	9 1	<u></u>	<u> </u>	m į	83
HF (lb/hr)	17.92769	17.42809	15.49422	14.67191	14.78486	12.79781	11.46992	11.65637	11.81892	11.18546	11.12928	12.3508	17.16693	17.7753	17.59542	17.73645	17.30438	17.18964		٠.	15.82948	13.34163	8.963546	8.737649	9.513347	9.523506	9.573108	9.488845	9.101594	9.753586	12.96275	15.3508	17.1759	17.49143	18.26414	18.212/5	18.30478	18.40159	18.5/49	18.42191	79.40/2/	18.31434	18.3496	18.35438	18.34064		18.29283
HCI (lb/hr)	143.4215	139.4247	123.9538	117.3753	118.2789	102.3825	91.75936	93.251	94.55139	89.48367	89.03426	98.80637	137.3355	142.2024	140.7633	141.8916	138,4351	137.5171	135.3227	131.7084	126.6359	106.7331	71.70837	69.9012	76.10677	76.18805	76.58486	75.91076	72.81275	78.02869	103.702	122.8064	137.4072	139.9315	146.1131	145./02	146.4382	14/.212/	148.5992	147.3753	147.25Ub	146.5147	146./968	146.8351	146.7251	146.4	146.3426
Mercury (lb/hr)	0.00992	• • •	٠.				•										_				_	• •		0.004835	0.005264	0.00527	0.005297	0.00525	0.005036	0.005397	0.007173	0.008494	0.009504	0.009679	0.010106			0.010182	0.010278	0.010193	OTOTOTS .	0.010134	0.010153	0.010156	0.010148		0.010122
	3.3068 0	0	_	_	-	-	0							_	_			0			-	_			_		0		_	_	_	_	-	-	_	_	_		_			٠.	_	_	_	_	3.3068 0.
Mercury (tb/TBtu)																												_										_									
Lead (lb/hr)	0.050198	0.048799	0.043384	0.041081	0.041398	0.035834	0.032116	0.032638	0.033093	0.031319	0.031162	0.034582	0.048067	0.049771	0.049267	0.049662	0.048452	0.048131	0.047363	_	-	0.037357	0.025098	0.024465	0.026637	0.026666	0.026805	0.026569	0.025484	0.02731	0.036296	0.042982	_	0	0.05114	0.050996	0.051253	0.051524	0.05201	0.051583	0.05154	0.05128	0.051379	0.051392	0.051354	0.05124	0.05122
PM-10 Lead (lb/hr)	376,4875	365.9957	325.3839	308.1151	310.487	268.7583	240.8722	244.7878	248.2014	234.8984	233.7187	259.3709	360.5113	373.2872	369.5097	372.4715	363.3978	360.9882	355.2278	345.74	332.4244	280.1788	188.2375	183.4936	199.7835	199.9968	201.0385	199.2689	191.1365	204.8286	272.221	322.3719	360.6996	367.326	383.5531	382.4738	384.4065	386.4395	390.0791	386.8663	380.557	384.6073	385.3478	385.4482	385.1595	384.3061	384.1555
PM-10 (lb/mmBw).	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	25	ខ្ម	29	18	57	32	47	1.	78.79	75	74.20	82.34	5	50	9	24	36	.60	F: 1	.76	53	88.94	59.76	58.25	63.42	63.49	63.82	63.26	89.09	65.02	86.42	102.34	.51	19:	121.76	.42	122.03	122.68	123.83	122.81	7/77	122.10	122.33	122.36	122.27	122.00	121.95
Coal tons/hr	119.52	116.19	103.29	97.81	98.57	85.32	76.47	17.77	78	74.57	74	82	114.45	118.50	117.30	118.24	115.36	114.60	112.77	109.76	105.53	88	53	82	63	63	63	63	9	65	98	707	114.51	116.61	121	121.42	122	777	123	122	771	122	122	122	122	122	171
nlt Operation (minutes)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	7.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1,00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	7.00	7.00	1.00	O :	1.00	1.00	1.00	1.00	1.00	1.00
mon Stack U	307.8	299.2	266.0	251.9	253.8	219.7	196.9	200.1	202.9	192.0	191.1	212.0	294.7	305.2	302.1	304.5	297.1	295.1	290.4	282.7	271.8	229.1	153.9	150.0	163.3	163.5	164.4	162.9	156.3	167.5	222.5	263.6	294.9	300.3	313.6	312.7	314.3	315.9	318.9	316.3	316.0	314.4	315.0	315.1	314,9	314.2	314.1
hack Com	5280.8	5119.0	1527.4	1286.0	4368.9	813.3	3401.5	3457.2	3500.4	3290.5	3271.0	3588.1	4970.6	5094.9	5039.9	5059.2	4898.6	4848.0	4743.8	4624.6	4455.4	3783.0	2554.6	2471.1	2550.0	2548.8	2568.2	2537.5	2416.7	538.7	3506.3	1401.1	4966.4	5103.4	5362.1	2789.6	5356.3	5386.4	5390.1	5404.8	541/.6	5411.5	5429.9	5429.7	5416.6	5427.7	5460.3
SO2 (Lb	525	15	45	42	43	33	34	щ 4	33	33	32	33	49	Ñ	ß	20	48	8	47	46	4	37.	52	77	52	55	52	52	74	22	ξ	4	49	ΣĪ	53	25	g :	53	53	7, 1	χ 4	ζ, i	7,	Z	χ, i	7,	3
Common Stack Common Stack Common Stack Unit Operation SO2 (Lb/hi) CO2 (Tons/hi) (minutes)	1,7603	1.7553	1.7462	1.7458	1.7659	1.7807	1.7723	1.7725	1.7699	1,7580	1.7564	1.7361	1.7303	1.7129	1.7117	1.7046	1.6917	1.6854	1.6760	1.6787	1.6820	1.6945	1.7032	1.6901	1.6019	1.5994	1.6032	1.5981	1.5868	1.5555	1.6165	1.7134	1.7280	1.7436	1.7545	1.7357	1.7487	1.7493	1.7342	1.7533	1.7588	1.7658	1.7684	1.7679	1.7649	1.7725	1.7838
Ox Lb/Hr	1350.0	1344.4	1239.3	1269.3	1266.7	1209.9	1063.3	1031.8	1030.4	1012.6	1000.1	1020.9	1376.0	1424.7	1398.5	1389.0	1343.6	1363.4	1341.7	1333.4	1311.2	1038.1	634.5	606.8	654.3	662.9	685.6	682.8	654.9	708.3	947.9	1132.8	1365.2	1094.7	1085.0	1069.7	1081.2	1093.1	1094.1	1088.2	108/3	1057.3	1062.4	1056.5	1028.1	1022.8	1025.4
Common Stack Common Stack NOx LD/mmBtu NOx Lb/Hr	0.4500	0.4610	0.4780	0.5170	0.5120	0.5650	0.5540	0.5290	0.5210	0.5410	0.5370	0.4940	0.4790	0.4790	0.4750	0.4680	0.4640	0.4740	0.4740	0.4840	0.4950	0.4650	0.4230	0.4150	0.4110	0.4160	0.4280	0.4300	0.4300	0.4340	0.4370	0.4410	0.4750	0.3740	0.3550	0.3510	0.3530	0.3550	0.3520	0.3530	0.3530	0.3450	0.3460	0.3440	0.3350	0.3340	0.3350
Commo	-				0																																										
Common Stack Heat Input (mm8tu)	2999.9	2916.3	2592.7	2455.1	2474.0	2141.5	1919.3	1950.5	1977.7	1871.7	1862.3	2066.7	2872.6	2974.4	2944.3	2967.9	2895.6	2876.4	2830.5	2754.9	2648.8	2232.5	1499.9	1462.1	1591.9	1593.6	1601.9	1587.8	1523.0	1632.1	2169.1	2568.7	2874.1	2926.9	3056.2	3047.6	3063.0	3079.2	3108.2	3082.6	3080.2	3064.6	3070.5	3071.3	3069.0	3062.2	3061.0
YT02 Gross C Load MW Value	168	165	147	141	144	112	104	105	107	100	66	110	161	168	167	168	163	161	159	154	150	98	0	0	0	0	0	0	0	7	29	112	158	164	176	175	175	176	176	176	1/6	176	176	176	176	175	176
YT01 Gross Y	157	125	135	125	126	118	11	102	104	88	86	107	146	153	152	154	55	150	147	144	134	146	154	155	159	160	160	160	155	157	157	159	151	154	158	157	190	161	161	161	160	55	160	160	160	160	160
1	8	ខ្មា	20	21	22	23	8	10	07	63	94	95	90	02	80	69	10	11	12	13	4	15	16	17	18	19	20	21	77	23	8	0.1	75	93	8	92	90	20	8	g :	10	# 1	77	13	14	15	16
Date/Hour	01-12-2015		01-12-2015			01-12-2015				01-13-2015 (01-13-2015 (01-13-2015 (01-13-2015	01-13-2015		01-13-2015																		01-14-2015	01-14-2015	01-14-2015	01-14-2015	01-14-2015	01-14-2015
	c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	O	0	0	0	ن	J	ی	ں	ن	ی	J	ں	ا ن	٠	٠ .	٠	J	J	٠	٠

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

CLA-CATILLY 15.5 CLA-CATILLY	Date/Hour	YT01 Gross Load MW Value	12.11	Common Stack Heat Input (mmBtu)	YTCZ Gross Common Stack Load MW Heat Input NOX LbirmBtu NOX Lbirm Value	Common Stack C	Common Stack SO2 (Lb/mmBtu)	SO2 (Lb/Hr)	mon Stack Common Stack Common Stack Unit Operation SO2 SO2 (LbHr) CO2 (Tons/H) (minutes)	Unit Operation (minutes)	Coal tons/hr	PM-10 (ib/mmBtu)	PM-10 (Lb/H1)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HC! (liv/hr)	HF (lb/hr)
11 11<		į				1	,		C C	,	.,		100	00000				63226 01
11 11 12 12 23<		161	175	3073.5		10/2./	1.//45	5453.9	315.3	7.00	122.45	0.1255	365.7243	0.051429				10,007.00
11 11<		161	174	3034.8		1077.4	1.7793	5399.9	311.4	1.00	120.91	0.1255	380.8674	0.050782	_		145.09	18.13625
11 11<		161	173	3027.4		1074.7	1.7855	5405.3	310.6	1.00	120.61	0.1255	379.9387	0.050658	_		144.7363	18.09203
21 13<	01-14-2015 20	160	170	3014.8		1091.4	1.7644	5319.2	309.3	1.00	120.11	0.1255	378.3574	0.050447	_		144.1339	18.01673
23 118 57 128 77 77 78 78 77 78	01-14-2015 21	154	170	2959.2		1032.8	1.7589	5204.8	303.6	1.00	117.90	0.1255	371,3796	0.049516	_		141.4757	17.68446
23 23<	01-14-2015 22	133	168	2749.9		973.5	1.7360	4773.9	282.1	1.00	109.56	0.1255	345.1125	0.046014	_		131.4693	16.43367
0.0 1.4.1 1.5.2 2.4.2. 0.5.4.2	01-14-2015 23	116	163	2570.0		920.1	1.7388	4468.6	263.7	1.00	102.39	0.1255	322.535	0.043004	_	0.008498	122.8685	15.35857
111 111 111 111 111 111 111 111 111 11	01-15-2015 00	141	153	2679.5		919.1	1.7333	4644.4	274.9	1.00	106.75	0.1255	336.2773	0.044836	3.3068		128.1036	16.01295
13 131 2485 1774 4771 2417 140 95.28 0.1155 9.04049 3.986 0.07951 3.158 0.07971 13.285 13.15 2.045 0.00 95.28 0.1155 9.00 9.00 13.15 13.15 2.00 0.390 98.12 17.77 2.00 2.00 9.00 17.70 13.15 0.125 9.00 9.00 13.15 13.15 0.125 9.00 0.00 9.00 13.15 13.15 0.125 9.00 0.00 13.15 13.15 0.00 13.15 13.15 0.00 13.15 13.15 0.00 13.15		142	153	2673.7		935.8	1.7396	4651.3	274.3	1.00	106.52	0.1255	335,5494	0.044739	3.3068		127.8263	15.97829
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		123	131	2355.7		826.9	1.7284	4071.6	241.7	1.00	93.85	0.1255	295.6404	0.039418	3,3068		112.6231	14.07789
4.9 1.9 1.9 1.9 1.0 5.0 0.0 1.9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 2.0 1.0 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0		130	131	2416.7		845.8	1.7364	4196.4	248.0	1.00	96.28	0.1255	303.2959	0.040439			115.5394	14.44243
6.6 148 <td></td> <td>129</td> <td>131</td> <td>2400.0</td> <td></td> <td>871.2</td> <td>1.7377</td> <td>4170.5</td> <td>246.2</td> <td>1.00</td> <td>95.62</td> <td>0.1255</td> <td>301.2</td> <td>0.040159</td> <td></td> <td>0.007936</td> <td>114.741</td> <td>14.34263</td>		129	131	2400.0		871.2	1.7377	4170.5	246.2	1.00	95.62	0.1255	301.2	0.040159		0.007936	114.741	14.34263
150 150 150 150 150 150 120 <td></td> <td>148</td> <td>157</td> <td>2840.0</td> <td></td> <td>985.5</td> <td>1.7277</td> <td>4906.6</td> <td>291.4</td> <td>1.00</td> <td>113.15</td> <td>0.1255</td> <td>356.42</td> <td>0.047522</td> <td></td> <td></td> <td>135.7769</td> <td>16.97211</td>		148	157	2840.0		985.5	1.7277	4906.6	291.4	1.00	113.15	0.1255	356.42	0.047522			135.7769	16.97211
9.9 18.5 7.5 8.9 0.4 17.8 7.5 8.9 1.0 </td <td></td> <td>160</td> <td>169</td> <td>3024.7</td> <td></td> <td>1134.3</td> <td>1.7452</td> <td>5278.6</td> <td>310.3</td> <td>1.00</td> <td>120.51</td> <td>0.1255</td> <td>379.5999</td> <td>0.050613</td> <td></td> <td></td> <td>144.6072</td> <td>18.0759</td>		160	169	3024.7		1134.3	1.7452	5278.6	310.3	1.00	120.51	0.1255	379.5999	0.050613			144.6072	18.0759
6 11 11 20 20 20 11 20 11 20 </td <td></td> <td>161</td> <td>172</td> <td>3039.4</td> <td></td> <td>1218.8</td> <td>1.7525</td> <td>5326.4</td> <td>311.8</td> <td>1.00</td> <td>121.09</td> <td>0.1255</td> <td>381.4447</td> <td>0.050858</td> <td></td> <td>0.010051</td> <td>145.31</td> <td>18.16375</td>		161	172	3039.4		1218.8	1.7525	5326.4	311.8	1.00	121.09	0.1255	381.4447	0.050858		0.010051	145.31	18.16375
0.0 11 289.55		158	170	3025.9		1186.2	1.7443	5278.0	310.5	1.00	120.55	0.1255	379,7505	0.050633		0.010006	144.6645	18.08307
15 18 19 18 18 18 18<	5-2015 09	157	167	2953.5		1128.2	1.7668	5218.2	303.0	1.00	117.67	0.1255	370.6643	0.049421		0.009767	141.2032	17.6504
11 12<		156	161	2886.6		1062.3	1.7739	5120.5	296.2	1.00	115.00	0.1255	362.2683	0.048302	3.3068	0.009545	138.0048	17.2506
11 11 118		129	124	2319.0		844.1	1.7648	4092.5	237.9	1.00	92.39	0.1255	291.0345	0.038804	3.3068	0.007668	110.8685	13.85857
11 11<		103	104	1938.5		796.7	1.7646	3420.6	198.9	1.00	77.23	0.1255	243.2818	0.032437	3.3068	0.00641	92.67729	11.58466
14 99 104 1905 1946 1976 1964 11762 3894 1970 7651 1125 241022 241023 24102 1970 7651 1125 24102 130 1356 13068 1006257 9308 9308 9308 9308 9308 9308 9308 9308 9308 <t< td=""><td></td><td>#</td><td>118</td><td>2149.9</td><td></td><td>780.4</td><td>1.7537</td><td>3770.2</td><td>220.6</td><td>1.00</td><td>85.65</td><td>0.1255</td><td>269.8125</td><td>0.035974</td><td>3.3068</td><td>0.007109</td><td>102.7841</td><td>12.84801</td></t<>		#	118	2149.9		780.4	1.7537	3770.2	220.6	1.00	85.65	0.1255	269.8125	0.035974	3.3068	0.007109	102.7841	12.84801
11 114 2046 0.145 1.766 1.146		66	104	1920.5		764.4	1.7662	3391.9	197.0	1.00	76.51	0.1255	241.0228	0.032136	3.3068	0.006351	91.81673	11.47709
14 18 14 18 14 18 14 18 14 18 14 18 14 18 14 18 14 18 14 18 14 18 14 18 14 18 24 10 14 11 18 14 18 10 11 11 18 20 18 11 18 20 11 18 18 11 18 18 18 10 11 11 18 18 11 18 18 19 11 18 18 10 11 11 18 18 10 11<		104	114	2046.5		765.4	1.7663	3614.8	210.0	1.00	81.53	0.1255	256.8358	0.034244	3.3068	0.006767	97.84064	12.23008
11 113 113 2400 0.3840 0.3840 1173 248.4 1.00 96.44 0.1255 363-379 0.040505 3.3068 0.008001 11.300 11.44683 13.93 0.04791 13.698 0.008071 13.698 0.008071 13.698 1.00805 13.068 0.008071 13.698 1.008071 13.698 0.008071 13.698 1.008071 13.698 0.008071 13.698 0.00871 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698 0.008071 13.698		98	101	1895.2		744.8	1.7655	3346.0		1.00	75.51	0.1255	237.8476	0.031713	3.3068	0.006267	90.60717	11.3259
18 144 161 28640 0.03791 1.7850 1.008 293.8 1.00 114.10 0.1255 344.22 0.04792 3.068 0.009471 1.246243 1.1155 19 151 151 277.11 0.3860 1092.2 1.7788 4.292.5 2.84.3 1.00 1.015 0.1255 347.77 1.064592 3.3088 0.00852 1.7135 1.525 3.9088 0.00479 3.3088 0.00852 1.7137 1.0088 1.0088 0.04479 3.0688 0.00852 1.7137 1.5088 1.0089 1.0089 1.0089 1.0089 1.009 <td>5-2015 17</td> <td>123</td> <td>135</td> <td>2420.7</td> <td></td> <td>881.1</td> <td>1.7836</td> <td>4317.6</td> <td></td> <td>1.00</td> <td>96.44</td> <td>0.1255</td> <td>303.7979</td> <td>0.040506</td> <td>3,3068</td> <td>0.008005</td> <td>115.7307</td> <td>14,46633</td>	5-2015 17	123	135	2420.7		881.1	1.7836	4317.6		1.00	96.44	0.1255	303.7979	0.040506	3,3068	0.008005	115.7307	14,46633
14 152 27711 0.3690 10225 17789 429.5 284.3 100 11A0 0.1255 335.9384 0.044791 330.68 0.009463 13.24829 15.56034 20 146 149 266.68 0.3640 974.4 1.778 387.1 206.9 10.0 10.25 235.9384 0.044791 330.68 0.009463 11.5968 1.5968 1.5968 1.5968 1.5968 1.5968 1.5369 1.5968 1.5968 1.5968 1.5968 1.53479 1.5968 1.59	5-2015 18	154	161	2864.0			1.7810	5100.8		1.00	114.10	0.1255	359.432	0.047924	3.3068	0.009471	136.9243	17.11554
20 44 1778 476.1 274.6 1.00 106.65 36.255 33.6934 0.02474 3.3086 0.00885 0.00885 0.00885 0.00885 0.00886 0.00885 0.00816 0.00885 0.00886		151	152				1.7789	4929.5		1.00	110.40	0.1255	347.7731	0.046369	3.3068	0.009163	132.4829	16.56036
21 108 109 2016.7 0.5390 10870 17787 2887.1 106 80.35 23.365 0.03454 3.3088 0.006603 86.41594 1.0.1253 23.4087 0.03413 83.006 0.00610 86.41294 1.0.1253 23.4087 0.03413 3.3088 0.006603 86.41294 1.1.0253 23.4087 0.03413 3.3088 0.006613 88.41472 1.1.028 23.4087 0.03413 3.3088 0.006613 88.41472 1.1.4053 24.0077 0.0341 3.3088 0.006613 88.41472 1.1.4053 24.0077 0.0341 3.3088 0.006613 88.41472 1.1.4053 24.0077 0.0341 3.3088 0.006913 88.41472 1.1.4053 24.0077 0.0341 3.3088 0.00613 88.41472 1.1.4053 89.41472 1.1.4053 89.41472 1.1.4053 89.41472 1.1.4053 89.41472 1.1.4053 89.41472 1.1.4053 89.41472 1.1.4053 89.41472 1.1.4053 89.41472 1.1.4053 89.41472		146	149				1.7788	4761.4		1.00	106.65	0.1255		0.044791	3.3068	0.008852	127.9745	15.99681
22 98 1845.0 0.4350 23.445.0 0.4350 23.445.5 0.4350 23.445.5 0.30873 3.3068 0.006108 88.2071 11.025 23 98 99 1844.6 0.4310 80.36 1.7700 33004 191.3 1.00 74.29 0.1255 23.46576 0.29954 3.3068 0.006108 88.2071 11.1430 00 91 1940.1 0.4450 50.43 1.861.3 1.0097 13.3 1.00 74.2 0.1255 23.46576 0.03954 3.3068 0.005109 8.258247 11.1430 01 90 1104.2 0.4450 32.4 1.4208 1.22.6 8.8 1.00 74.2 0.1255 1.4657 3.3068 0.00394 4.2465 5.7944 4.5988 0.00347 4.2498 0.1255 1.4657 1.4658 1.1467 1.4668 1.4668 1.4668 1.4668 1.4668 1.4668 1.4668 1.4668 1.4668 1.4668 1.4668 1.46	5-2015 21	108	109	2016.7			1.7787	3587.1		1.00	80.35	0.1255		0.033746	3,3068	0.006669	96.41594	12.05199
23 98 99 1864 0.4310 803.6 1,7700 390.4 191.3 1.00 74.29 0.1255 24.40073 0.0311 3.3068 0.00516 88.14422 1.14430 00 92 99 1790.1 0.4180 74.83 1.681.8 1.003.7 1.88.7 1.00 71.25 0.1255 1.36.7 0.03961 85.344.2 1.0698 01 90 1790.1 0.4180 7.23.8 1.430 1.13.3 1.00 71.25 0.1255 1.460 0.03961 57.79044 1.0698 02 87 90.4 0.3060 32.5 1.4208 1.23.6 1.00 34.3 0.1255 11.261 3.3068 0.00394 41.77594 41.6469 0 0 85 904.8 0.3600 32.5 1.4499 134.6 1.00 3.43 0.1255 11.268 0.00594 41.77594 41.2765 5.7194 41.2766 5.7194 41.2766 5.7194 41.2767	5-2015 22	98	66	1845.0			1.7694	3264.5		1.00	73.51	0.1255	231.5475	0.030873	3.3068	0.006101	88.20717	11.0259
00 92 199,1 0.4180 748.3 1681.3 3009,7 183.7 100 71.32 0.1255 224.6576 0.209944 3.006 0.005919 85.58.847 10.6978 01 30 90 1104,2 0.4550 50.24 1.408 11.33 1.00 94.39 0.1255 18.6771 0.108477 3.068 0.005918 85.58.84 1.00 94.39 0.1255 18.6771 0.108477 3.068 0.005918 85.5884 1.00 95.81 0.1255 18.6771 0.108471 3.068 0.005978 41.77291 5.4889 0.00597 41.499 1.934 1.00 35.81 0.1255 11.8377 0.14411 3.068 0.00597 41.2773 5.4989 0.00597 41.2773 5.4989 0.00597 41.4999 13.946 92.8 1.00 35.81 0.1255 13.0567 0.01541 3.068 0.00297 41.2773 5.45794 01 0.0 0.0 0.0 0.0 0.0 <t< td=""><td></td><td>86</td><td>66</td><td></td><td></td><td></td><td>1.7700</td><td>3300.4</td><td></td><td>1.00</td><td>74.29</td><td>0.1255</td><td>234.0073</td><td>0.0312</td><td>3,3068</td><td>0.006166</td><td>89.14422</td><td>11.14303</td></t<>		86	66				1.7700	3300.4		1.00	74.29	0.1255	234.0073	0.0312	3,3068	0.006166	89.14422	11.14303
01 30 1104.2 0.4550 502.4 1.4805 153.4 1.33 1.00 43.99 0.1255 138.5771 0.01847 3.3068 0.020364 4.59980 02 8 3 861.2 0.3760 33.38 1,4208 123.4 1.00 34.31 0.1255 143.02 0.02441 3.3068 0.002392 4.27593 5.79944 6.59880 04 8 3 8.36 0.3600 32.36 124369 122.4 1.00 34.31 0.1255 11431 3.068 0.00292 4.27573 5.14660 04 0 85 994.8 0.3600 32.5 1.439 136.4 1.00 36.02 0.1256 13.08 0.00292 4.27573 5.40773 05 0 0.3540 0.3540 1.4351 1096.1 7.8 1.00 36.4 0.125 1.1568 0.01574 3.3068 0.00292 4.17729 5.14669 0 0 0 0.		92	66				1.6813	3009.7	183.7	1.00	71.32	0.1255	224.6576	0.029954	3.3068	0.005919	85.58247	10.69781
02 87 861.2 0.3760 323.8 1.4208 1.225.6 88.4 1.00 34.31 0.1255 108.0806 0.014411 3.3068 0.002384 41.177291 5.14661 03 85 898.9 0.3860 3.236 1.4369 129.6 1.00 35.81 0.1255 11.2812 0.01541 3.3068 0.002392 42.9773 5.14661 04 85 994.8 0.3660 325.6 1.4499 136.4 92.8 1.00 35.81 0.1255 13.3068 0.012942 42.9773 5.14661 05 8 994.8 0.3660 1.44093 1345.7 95.8 1.00 37.20 0.1255 13.562 3.3068 0.02972 42.9753 5.40471 05 0 0 0.141 1.463 1345.7 95.8 1.00 37.20 0.1255 1.01662 3.3068 0.02972 42.9753 5.54034 0 0 0 0.0000 0.0 0.0 </td <td></td> <td>30</td> <td></td> <td>-</td> <td></td> <td></td> <td>1.4805</td> <td>1634.8</td> <td>-</td> <td>1.00</td> <td>43.99</td> <td>0.1255</td> <td>138.5771</td> <td>0.018477</td> <td>3.3068</td> <td>0.003651</td> <td>52.79044</td> <td>6.598805</td>		30		-			1.4805	1634.8	-	1.00	43.99	0.1255	138.5771	0.018477	3.3068	0.003651	52.79044	6.598805
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	0	0.000	0.0000	0.000.0	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0000	0.000	0.0000	0.0000	0.000.0	0.0000	0.000.0	0.000	0.000.0	0.000.0	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000
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Lead (lb/hr)				_					_				-	-	_	_	_	_										_																	
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PM-10 (lb/mmBtu)		0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1252	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr		9 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	000	8 8	8 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jult Operation (minutes)	ć	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	3 6	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Stack L	ć	2 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	3 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0
SOZ (Lb/Hr)		9 6	0.0	0.0	0.0	9: G	0.0	0.0	0.0	0.0	0.0	9 6	3 6	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0 0:0	0.0
Common Stack Common Stack Common Stack Unit Operation SOZ (Lb/Hr) CO2 (Tons/Hr) (minutes)	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0:0	0.0	0.0	3 6	000	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Common Stack Heat Input		0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0
YT02 Gross C Load MW		0 0	. 0	0	0	0	0 1	0	0	0	0	0 (> C	3 6	· c	0	0	0	0	0	0	0	O	0	0	0	0	0	0	0		0 (.	0	0	0	0	0	0	0	0	0	0		0
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5		01-16-2015 16			01-16-2015 20								01-1/-2015 04		01-17-2015 07			01-17-2015 10	01-17-2015 11	01-17-2015 12	01-17-2015 13	01-17-2015 14	01-17-2015 15	01-17-2015 16	01-17-2015 17	01-17-2015 18	01-17-2015 19	01-17-2015 20		01-17-2015 22			01-18-2015 01		01-18-2015 04		01-18-2015 06	01-18-2015 07	01-18-2015 08	01-18-2015 09	01-18-2015 10	01-18-2015 11	01-18-2015 12	01-18-2015 13	01-18-2015 14

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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Mercury (lb/hr)	•	0	0	5	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0 (0 (0	0	0	0 (0	0
Mercury (lb/TBtu)	· -	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Lead (lb/hr)	:	0	0	0 0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	Б .	0	0	0	0 (0	0
PM-10 (Lb/Hr)		0	0	0 (- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0
PM-10 (lb/mm8w)	-	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr		0.00	0.00	0.00	9 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	•	00.00	0.00	0.00	0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.5	0.00	0.00
nmon Stack Un 2 (Tons/Hr)	-	0:0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
mmon Stack Cor O2 (Lb/Hr) - CO	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack Common Stack Unit Operation 802 SO2 (Sons-Hr) (minutes)		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ommon Stack NOx Lb/Hr	<u>.</u>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack Common Stack Heat Indu NOx Lb/Hr NOx Lb/Hr	:	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000
Common Stack C. Heat Input		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YT02 Gross Co Load MW	-	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	o	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT01 Gross Y Load MW	-	0	0	0	00	0	0	0	0	0	0	O	0	0	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Date/Hour		01-18-2015 15			01-18-2015 18 01-18-2015 19			01-18-2015 22	01-18-2015 23	01-19-2015 00	01-19-2015 01	01-19-2015 02		01-19-2015 04	01-19-2015 05	01-19-2015 06	01-19-2015 07	01-19-2015 08	01-19-2015 09	01-19-2015 10	01-19-2015 11	01-19-2015 12	01-19-2015 13	01-19-2015 14	01-19-2015 15	01-19-2015 16	01-19-2015 17	01-19-2015 18	01-19-2015 19	01-19-2015 20	01-19-2015 21	01-19-2015 22	01-19-2015 23	01-20-2015 00	01-20-2015 01	01-20-2015 02			01-20-2015 05				01-20-2015 09	01-20-2015 10			01-20-2015 13
TO CO	摄																																														

Vhr)	-	0	0	0	0 0	5 (> C			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HF (Ib/hr)	_	_	_	_			. .			. 0	0	0	0	_	_	_	0	_	_		0	0	0	0	0	0	_	0	0				0	0	0	0	_	_		0	_	ο.	0 .	0	0	0	0
HCI (Ib/hr)		0	0	0	0 0	.	<i>-</i>		, .	. 0	0	0	0	0	U	u	u	0	0	0		0	Ü				0		_	_	_	_	Ü	_	_	_	_	_			_	_	_	_	_	_	J
An 1	_	0	0	0	0 0	- (-	· c		. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury	9	_	_	_	<u> </u>						_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_			_	0	0	0	_	0			_	_		0	ο.	0	
Mercury	(100)	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000
Lead (lb/hr)	- - -	0	0	0	0 0	.	5 6) C	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10	(100)	0	0	0	0 0	5 (.	· c	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10	51	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0 1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	2.0	0.00	0.00	0.00	0.00	0.00	0.00		800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coal tons/hr		ö	Ö	Ö	00	j (- ·	; c	ic	id	Ö	Ö	Ö	Ö	Ö	ö	Ö	ö	Ö	o	Ö	Ö	Ö	Ö	Ö	Ö	ö	Ö	Ö	Ö	ö	Ö	Ö	Ö	Ö	o	o	o	o	Ö	o	o	o	D)	o	o	Ö
ink Operation	(spanullu)	0.00	0.00	0.00	0.00	0.00	0.0	8 6	000	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00
mmon Stack	(1 ons/ref)	0.0	0.0	0.0	0.0	2.5	0 0	3 6	8 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack Common Stack Unit Operation	סיב (רפיוחיו) ביט	0.0	0.0	0.0	0.0	0.0	9 6	9 6	2 6	00	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0:0	0:0	0.0
Stack	ñ — ∃	0.0000	0.0000	0.000.0	0.0000	90	0.0000	0000	0000	0.0000	0.000.0	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.000	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.0000	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.0000	0.000.0	0.0000	0.000.0	0.000.0	0.0000	0.000.0
Common Stack SO2	(Lb/mmB	0.0	0.0	0.0	0.0	o 6	5 6	9 6	3 6		8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0	0	9	0.0	0.0	0.0	0.0	0.0	0.0	ö	0.0	ö	ö	0.0	9.	9.	0.0	0.0	0.0	0.	0.0	0.0	0.0
ommon Stack	MOX LB/MI	0.0	0.0	0.0	0.0	0.0	0.0	3 6	9 6	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack	l mammar v	0.0000	0.0000	0.0000	0.0000	0.000	0.0000		00000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000
S S	<u> </u>	0.0	0.0	0.0	0.0	0.0	0 0		3 5	0.0	9	0.0	0.0	0.	0.0	99	0.0	9	9.	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0:0	0:0	0.0	0.0	0.0	0.0
Common Stack Heat Input	(mm8tu)		_	_							_	_	_	_	_	_	_			_																											
YT02 Gross. Load MW	Value	0	0	0	0 (5	00	0 0	o C	• •	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT01 Gross	_	0	0	0	0 (5 (0 0		9 6		. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y Date/Hour	<u> </u>	01-20-2015 14	01-20-2015 15	01-20-2015 16			01-20-2015 19						01-21-2015 02	01-21-2015 03	01-21-2015 04	01-21-2015 05		01-21-2015 07	01-21-2015 08	01-21-2015 09	01-21-2015 10	01-21-2015 11	01-21-2015 12	01-21-2015 13	01-21-2015 14	01-21-2015 15	01-21-2015 16	01-21-2015 17	01-21-2015 18	01-21-2015 19	01-21-2015 20	01-21-2015 21	01-21-2015 22	01-21-2015 23	01-22-2015 00	01-22-2015 01	01-22-2015 02	01-22-2015 03	01-22-2015 04					01-22-2015 09		01-22-2015 11	01-22-2015 12

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HF (lb/hr)		0	J	0	0 0	, .	, 0	Ü	Ü	Ü		_			,	,	,							300000	0.027307	0.178685	0.270717	0.103984	0.062384	0.047809	0.100398	0.029492		_	_	_	_									
HCI (lluhr)		0	0	0	Б С	o c	0	0	0	0	0	0	0	0 (5 0	-	5 6			· ·	, c		o c	0 11541	0.51245	1.429482	2.165737	0.831873	0.499076	0.38247	0.803187	0.235936	0	0 '	0	0 (0 '	۰ ۱	0 (•	.	.	-		- 0	5
Mercury		0	0	0	0 0	o c	0	0	0	0	0	0	0	0 '	5 6	- (> 6	-		0 0	o c	,		7 005.06	7.30E-00	9.895-05	0.00015	5.75E-05	3.45E-05	2.65E-05	5.56E-05	1.63E-05	0	0	0	0	0 '	o (0 4	.	o 6	5 6	-	> 6	> (5
Mercury		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0000	0.000	0000	0000	0000	0.000	000000	2,3000	3 3068	3,3068	3,3068	3.3068	3.3068	3.3068	3.3068	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.000	0.000	0.000	0.000	0.0000
Lead (lb/hr)	<u>- :</u> - :	0	0	0	0 0	o c	9 0	0	0	0	0	0	0	0	9 (-	> 6	> 6	5 0	> 0	> C	> C	5 C	0 0 0 0	4.046-05	0.000210	0.000758	0.000291	0.000175	0.000134	0.000281	8.26E-05	0	0	0	0	0	0	0 (5 6	> 0	> 0	5 6	5 (- •	>
PM-10	Ì	0	0	0	0 0	- -	0	0	0	0	0	0	0	0	o (5 (- (- (5 6			.	5 C	100000	1 632769	3 75745	5.68515			1.004	2.1084	0.619343	0	0	0	0	0	0	0	5 6	5 6	5 6	.	> (o (>
PM-10		0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1366	0.1255	0.1255	0.1255				0.1255	0.1255	0.1255	0.1255	0.1255		0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	3. T	0.00	0.00	0.00	0.00	9 6	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	3 6	8 8	0000	0.00	9 6	3.5	1 19	18	0.69	0.42	0.32	0.67	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.0	0.00	0:00
	-	0.00	0.00	0.00	0.00	9 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	9 6	9 6	9 9	9 5	77.0	9 5	100	0.58	0.73	1.00	1.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.0	9.00	0.00	0.00	0.00	0.00
ack Unit Ope		0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	2 6	0.0	2 6	0 6	0.0	ņ ,	n t	7.7 4.6	× ×	1 1	0.8	1.7	0.5	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0
Common St	(1011)																								- ·					0	0	0	0	0	0	0	0	0	0	0.0		0 (р, (0	0:0	0.0
Common Stack	SOZ (LBINI)	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	9 6	3 6	0.0	0.0	0.0	0.0	3 6	9 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						o ,	o` ·			Ö
Common Stack Common Stack Common Stack Unit Operation SO2	(Lb/mm8ш)	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000
mmon Stack	NOX LENT	0.0	0.0	0.0	0.0	9 6	9 6	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	0.0	0.00	3 5	: :	9	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0
Common Stack Common Stack		0.0000	0.0000	0.0000	0.0000	0.0000	00000	0000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0033	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Common Stack Com	ON (DIGHER)	0.0	0.0	0.0	0.0	0.0	9 6	2 0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	4.4	אַ ה אַ פּ	ין קיי	5.7	10.4	8.0	16.8	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		0	0	0	0	0 (5 C	, ,	. 0	0	0	0	0	0	0	0	0	0	0	5 (5 (0 '	o (ь,	D (5 6	o -		, ,	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT02 Gross Load MW	Value	÷																												_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
YT01 Gross Load MW	Value	0	0	0	0	0 (5 6	o C		0	0	0	0	0	0	0	0	0	0		יכו	د	.	. ن	.	ى ر	- ر	4 C		0	J	U	J	J	J	J	J	J	J	<u></u>	_	_	_	_	_	~
Date/Hour		01-22-2015 13					01-22-2015 18				01-22-2015 23	01-23-2015 00	01-23-2015 01	01-23-2015 02												01-23-2015 14	01-23-2015 15				01-23-2015 20	01-23-2015 21	01-23-2015 22	01-23-2015 23	01-24-2015 00	01-24-2015 01	01-24-2015 02	01-24-2015 03	01-24-2015 04							01-24-2015 11

Date/Hour	YT01 Gross Load MW Value	Y702 Gross Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack Common Stack NOx Lb/Hr	Common Stack NOx Lb/Hr	Common Stack C SO2 (Lb/mmBtu)	Common Stack Common Stack Unit Operation SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	ommon Stack (Jolt Operation (minutes)	Coal tons/hr	PM-10 (lb/mm8tu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (tb/TBtu)	Mercury (lb/hr)	HCI (lb/lhr)	HF (b/hr)
01-24-2015 12	0		0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
		0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
01-24-2015 15	0	0	0.0		0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0 (0 (0.0000	0 (0 (0 0
	0	0	0.0		0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0 000	0 0	0.000	ם ני	ט ני ט ני	0 0
	0 0	0 0	7.9	0.0000	0.0	0.0000	0.0	0.7	0.70	0.27	0.1255	6.6013	0.000012	3.3068	2.22E-05	0.3212/5	0.040159
01-24-2015 18	5 6	0 0	0.70		Š	00000	3 6	1 t	8 8	7.10	0.1255	8 1876	0.0000	3 3068	0.000716	3.117131	0.389641
	- c	٠.	2.50 89.6		2.2 2.2	0.0000	9 0	9.2	1.00	3.57	0.1255	11.2448	0.001499	3.3068	0.000296	4.283665	0.535458
	10	10	126.9		3.2	0.0000	0.0	13.0	1.00	5.06	0.1255	15.92595	0.002123	3.3068	0.00042	6.066932	0.758367
	0	0	242.4		12.6	0.0099	2.4	24.9	1.00	99'6	0.1255	30.4212	0.004056	3.3068	0.000802	11.58884	1.448606
01-24-2015 23	0	0	224.1		12.8	0.0406	9.1	23.0	1.00	8.93	0.1255	28.12455	0.00375	3.3068	0.000741	10.71394	1.339243
01-25-2015 00	0	0	209.7		12.2	0.0620	13.0	21.5	1.00	8.35	0.1255	26.31735	0.003509	3.3068	0.000693	10.0255	1.253187
01-25-2015 01	0		193.9	0.0542	10.5	0.0624	12.1	19.9	1.00	7.73	0.1255	24.33445	0.003245	3.3068	0.000641	9.27012	1.158765
01-25-2015 02	0	0	193.4		10.6	0.0574	11.1	19.8	1.00	7.71	0.1255	24.2717	0.003236	3.3068	0.00064	9.246215	1.155777
01-25-2015 03	0	0	192.2	0.0541	10.4	0.0546	10.5	19.7	1.00	7.66	0.1255	24.1211	_	3,3068	0.000636	9.188845	1.148606
01-25-2015 04	0	0	180.2		80 80 90	0.0572	10.3	18.5	1.00	7.18	0.1255	22.6151	_	3.3068	0.000596	8.615139	1.076892
01-25-2015 05	0	0	226.8		11.8	0.0573	13.0	23.3	1.00	9.04	0.1255	28.4634	0.003795	3.3068	0.00075	10.84303	1.355378
01-25-2015 06	0	0	209.7	0.0510	10.7	0.0572	12.0	21.5	1.00	8.35	0.1255	26.31735	0.003509	3.3068	0.000693	10.0255	1.253187
01-25-2015 07	0	0	226.5		13.1	0.0508	11.5	23.2	1.00	9.05	0.1255	28.42575	0.00379	3.3068	0.000749	10.82869	1.353586
01-25-2015 08	H	П	200.1		11.0	0.1244	24.9	20.5	1.00	7.97	0.1255	25.11255	0.003348	3.3068	0.000662	9.566534	1.195817
01-25-2015 09	0	0	206.5		10.1	0.0823	17.0	21.2	1.00	8.23	0.1255	25.91575	0.003455	3,3068	0.000683	9.87251	1.234064
01-25-2015 10	0	0	226.8		12.0	0.0600	13.6	23.3	1.00	9.04	0.1255		0.003795	3.3068	0.00075	10.84303	1.355378
01-25-2015 11	0	24	419.0		70.4	0.6585	275.9	43.0	1.00	16.69	0.1255		0.007011	3.3068	0.001386	20.03187	2.503984
01-25-2015 12	6	86			363.4	1.2229	1234.5	103.6	1.00	40.22	0.1255		_	3.3068	0.003338	48.26295	6.032869
01-25-2015 13	77	106			667.1	1.5530	2697.9	178.2	1.0	69.21	0.1255		_	3.3068	0.005745	83.05339	10.38167
01-25-2015 14	66	-1				1.7288	3375.0	200.3	1.00	77.78	0.1255	245.0011	0.032666	3.3068	0.006455	93.3322/	11.66653
	ខ្ព				•	1.7223	3262.8	194.4	96.	75.47	0.1255	•		5.3068	0.005254	90.56892	11.32112
	88	86				1.7232	3204.3	190.8	9.5	74.08	0.1255		•	3.3068	0.006149	88,9004	11.11255
01-25-2015 17	9	66				1.7226	3240.5	193.0	1.00	74.95	0.1255		0.0314/8	3.3058	0.006221	89.93/85	11.24223
01-25-2015 18	19	86				1.7075	3223.5	193.7	D	77.57	0.1255	436.931 7917 561	0.03159	3.3058	0.000243	70.2017 90.02726	11 13030
01-25-2015 19	<u> </u>	20 8	1862.3	0.5480	1020.5	1 7224	3750.7	193.6	9 -	75.19	0.1255		0.03158	33068	0.006241	90.22948	11.27869
	5	3 6			844.7	1.7331	3267.5	193.4	1.00	75.12	0.1255		0.031549	3.3068	0.006235	90.13865	11.26733
	76	•			749.6	1.7253	3241.3	192.8	1.00	74.85	0.1255		0.031436	3.3068	0.006212	89.81833	11.22729
01-25-2015 23	97	100				1.7197	3219.0	192.0	1.00	74.57	0.1255	234.9109	_	3.3068	0.00619	89.48845	11.18606
01-26-2015 00	86	66	1872.0	0.3510		1.7461	3268.7	192.1	1.00	74.58	0.1255		_	3.3068	0.00619	89.49801	11.18725
01-26-2015 01	88	99				1.7554	3301.1	192.9	1.00	74.92	0.1255	-	_	3.3068	0.006218	89.90438	11.23805
01-26-2015 02	97					1.7646	3290.4	191.3	1.00	74.29	0.1255	• •	0.031202	3.3068	0.006166	89.149	11.14363
	100					1,7771	3381.2	195.2	1.00	75.80	0.1255		_	3.3068	0.006291	90.96096	11.37012
01-26-2015 04	66	100			690.7	1.7869	3354.0	192.6	1.00	74.78		• •	_	3.3068	0.006207	89.73705	11.21/13
0126-2015 05	66					1.7838	3466.8	199.4	1.00	77.43			0.032521	3.3068	0.006427	92.91633	11.61454
01-26-2015 06	118					1.8242	4127.9	232.2	1.00	90.15			0.037864	3.3068	0.007483	108.181/	13.522/1
01-26-2015 07	125					1.8311	4637.0	259.8	1.00	100.89			0.042375	3.3068	0.0085/4	50/0777	15.13386
	117	149				1.8400	4554.8	254.0	1.00	98.63			0.041423	3.3058	0.008186	118.3506	14./9382
01-26-2015 09	136	148				1.8586	4853.4	267.9	1.00	104.04		•••	0.043695	3.3068	0.008635	124.843	15.60538
01-26-2015 10	130	165	2708.4	t 0.3700	1002.1	1.7778	4815.1	277.9	1,00	107.90	0.1255	339.9042	0.04532	3.3068	0.008956	129.4853	16.18556

Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	TOZ Gross Common Stack Common Stack Common Stack SSC SSC Value (MmBtu) (Lock Library Nox Lahring (Library Library (Library))	Common Stack C	Sommon Stack C	SO2 (Lb/mmBu)	SOZ (Lbrird) SOZ (Lbrird) CO (Tonsitr) (minutes)	ommon Stack U	Init Operation (minutes)	Coal tons/hr	PM-10 PM-10 (Lb/H)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCI (lb/hr)	HF (lb/hr)
01-26-2015 11	137	142	2592.3	0.4210	1091.4	1.8507	4797.5	266.0	1.00	103.28	0.1255	325.3337	0.043377	3.3068	0.008572	123.9347	15.49183
01-25-2015 12	132	135	2474.7	0.3860	955.2	1.8729	4634.8	253.9	1.00	98.59	0.1255	310.5749	0.041409		0.008183	118.3124	14.78904
01-26-2015 13	130	128	2381.2	0.3750	893.0	1.8701	4453.1	244.3	1.00	94.87	0.1255	298.8406	0.039845		0.007874	113.8422	14.23028
01-26-2015 14	130	129	2398.2	0.3810	913.7	1.8723	4490.1	246.1	1.00	95.55	0.1255	300.9741	0.040129	3.3068	0.00733	117.475	14.3318/
01-26-2015 15	129	125	2351.4	0.3840	902.9	1.8/16	4400.8	241.3	9 5	93.68	0.1255	7007.567	0.035540	3.3068	0.007778	113 651	14.20637
01-26-2015 16	130	126	2377.2	0.3790	936.2	1.8847	4655.7	253.5	1.00	98.42	0.1255	310.0227	0.041336	3.3068	0.008169	118.102	14.76275
01-26-2015 18	142	138	2596.8	0.3900	1012.8	1.8862	4898.0	266.4	1.00	103.46	0.1255	325.8984	0.043452	3.3068	0.008587	124.1498	15.51873
01-26-2015 19	150	151	2774.0	0.3780	1048.6	1.9065	5288.7	284.6	1.00	110.52	0.1255	348.137	0.046418	3.3068	0.009173	132.6215	16.57769
01-26-2015 20	150	151	2789.0	0.3550	990.1	1.9111	5330.1	286.2	1.00	111.12	0.1255	350.0195	0.046669	3.3068	0.009223	133.3386	16.66733
01-26-2015 21	149	151	2777.9	0.3500	972.3	1.9222	5339.7	285.0	1.00	110.67	0.1255	348.6255	0.046483	3.3068	0.009186	132.808	16.601
01-26-2015 22	125	151	2552.4	0.3700	944.4	1.9328	4933.2	261.9	1.00	101.69	0.1255	320.3262	0.042709	3.3068	0.00844	122.0271	15.25339
	111	148		0.3430	824.1	1.9391	4659.1	246.5	9 5	95.73	0.1255	301.5389	0.040205	3.3068	0.007945	91.46773	11.43347
01-27-2015 00	8 6	POT 75	1910.2	0.3940	752.6	1.9058	3640.5	196.0	1.00	76.10	0.1255	239.7301	0.031964	3.3068	0.006317	91.3243	11.41554
	103	101		0.3800	756.5	1.9158	3813.8	204.2	1.00	79.31	0.1255	249.8329	0.033311	3.3068	0.006583	95.17291	11.89661
	66	5 5		0.4080	787.1	1.9130	3690.3	197.9	1.00	76.86	0.1255	242.1021	0.03228	3.3068	0.006379	92.22789	11.52849
01-27-2015 04	105	112	2069.4	0.3780	782.2	1.9196	3972.4	212.3	1.00	82.45	0.1255	259.7097	0.034627	3.3068	0.006843	98.93546	12.36693
01-27-2015 05	100	105	1954.7	0.4190	819.0	1.9126	3738.6	200.6	1.00	77.88	0.1255	245.3149	0.032708	3.3068	0.006464	93.45179	11.58147
01-27-2015 06	113	122	2205.3	0.3930	866.7	1.9312	4258.8	226.3	1.00	87.86	0.1255		0.036901	3.3068	0.007292	105.4327	13.17908
01-27-2015 07	131	147			986.2	1.9334	5031.0	267.0	1.00	103.67	0.1255		0.043543	3.3068	0.008605	124.408	15.551
01-27-2015 08	105	162			991.4	1.9545	4832.2	253.7	1.00	98.50	0.1255	310.2737	0.041369	3.3068	0.008175	118.1976	14.7747
01-27-2015 09	117	164			970.4	1.9543	5043.6	264.8	1.00	102.82	0.1255	323.8904	0.043185	3.3068	0.008534	123.3849	15.42311
01-27-2015 10	148	163			1002.8	1.9411	5545.6	293.1	1.00	113.82	0.1255	358.5535	0.047806	3.3068	0.009447	136.5896	17.07371
	148	163		0.3570	1020.3	1.9340	5527.1	293.2	1.00	113.86	0.1255	358.6665	0.047821	3.3068	0.00945	136.6327	17.07908
	143	163			1056.7	1.9413	5426.7	286.8	1.00	111.37	0.1255	350.8227	0.046776	3.3068	0.009244	133.6446	16.70538
	147	163			1052.4	1.9425	5525.0	291.8	9.5	113.32	0.1255	340,4422	0.047594	3.3058	2009400	133 1187	16/55/01
	143	163			1052.5	1.9455	541/.0	7.582.7	7 F	105 23	0.1255	349.4422	0.046352	3 3068	0.003207	126.2773	15.78466
	133	153	2641.3	0.3750	990.5	1.9515	5101.6	0.1.7	9 5	104.58	0.1253	329.425	0.043923	3.3068	0.00868	125.4932	15.68665
01-2/-2015 16		į			10001	1 9322	5340.1	283.6	1.00	110.11	0.1255	346.8569	0.046247	3.3068	0.009139	132.1339	16.51673
	£ 55	154			1032.8	1.9407	5431.7	287.2	1.00	111.51	0.1255	351.2494	0.046833	3,3068	0.009255	133.8072	16.7259
	169	157			1104.2	1.9280	5753.7	306.2	1.00	118.90	0.1255	374.5297	0.049936	3.3068	0.009868	142.6757	17.83446
	169	158	2994.7	0.3590	1075.1	1.9281	5774.2	307.3	1.00	119.31	0.1255	M	0.050111	3.3068	0.009903	143.1729	17.89661
01-27-2015 21	169	821			1077.7	1.9243	5776.8	308.0	1.00	119.60	0.1255		_	3,3068	0.009927	143.5219	17.94024
	158	149			980.7	1.9280	5402.5	287.5	1.00	111.64	0.1255			3,3058	0.009265	253,2649 20,101	16.74502
	139	140			902.8	1.9236	494/./	265.9	9.1	102.20	0.1255 0.1355	325.7350	0.045059	3.3068	_	124.0637	15.50797
01-28-2015 00	137	140	0.0852	0.3220	925.0	1 9407	5058.7	200.2	8 6	103.85	0.1255		0.043618	3,3068	0.00862	124.6231	15.57789
	Ę,	145			894.2	1.9401	5117.8	270.6	1.00	105.10	0.1255		0.04414	3.3068	0	126.1147	15.76434
	139	145			913.4	1.9397	5033.4	266.2	1.00	103.38	0.1255	325.66	0.043421	3.3068	0.008581	124.059	15.50737
	142	149			956.7	1.9367	5190.1	274.9	1.00	106.76	0.1255		0.044841	3.3068	_	128.1179	16.01474
01-28-2015 05	150	153	2826.5	0.3660	1034.5	1.9141	5410.3	290.0	1.00	112.61	0.1255		0.047296	3.3068	0.009347	135,1315	16.89143
01-28-2015 06	167	157	2979.1	0.3510	1045.7	1.9268	5740.2	305.7	1.00	118.69	0.1255	,	0.049849	3.3068	0.009851	142.4271	17.80339
01-28-2015 07	170	158			1063.6	1.9392	5793.6	306.5	1.00	119.03	0.1255		_	3.3068	0.009879	142.8335	17.85418
	168	158			1084.3	1.9348	5795.1	307.3	1.00	119.33	0.1255	u)	_	3.3068	_	143.1968	17.8996
01-28-2015 09	155	158	2892.0	0.3440	994.8	1.9348	5595.4	296.7	1.00	115.22	0.1255	362.946	0.048392	3.3068	0.009563	138.2529	77.28267

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

Date/Hour Coad MW	ross YT02 Gross AW Load MW e. Value	SS. Common Stack Heaf Input (mmBtu)	Common Stack Com	mon Stack Ox Lb/Hr	Common Stack Co SO2 (Lb/mm8tu)	Common Stack Common Stack Unit Operation SO2 (LbHr) CO2 (Tons/Hr) (minutes)	ommon Stack U		Coel tons/fir	PM-10 (lb/mmBu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCI (Ib/hr)	нғ (юлл)
01-28-2015 10	132 1	154 2649.2	.2 0.3900	1033.2	1.9357	5128.1	271.8	1.00	105.55	0.1255	332.4746	0.044329		0.00876	126.655	15.83187
01-28-2015 11	116 1		.8 0.3970	926.5	1.9372	4521.0	239.5	1.00	92.98	0.1255	292.8919	0.039052	_	0.007717	111.5761	13.94701
				811.6	1.9298	4362.6	231.9	8 5	90.07	0.1255	283.7179	0.037828	3.3068	0.007476	108.0813	13.51016
01-28-2015 13	104	112 2030.3	0.3150	639.5	1.9245	3907.4	197.7	9 6	80.89	0.1255	241.1985	0.032159		0.006355	91.88367	11.48546
	-1			634,6	1.9313	3636.9	193.2	1.00	75.02	0.1255	236.3291	0.03151		0.006227	90.02869	11,25359
				687.9	1.9406	3915.0	207.0	1.00	80.37	0.1255	253.1837	0.033757	_	0.006671	96.4494	12.05618
01-28-2015 17	148 1	152 2783.4	.4 0.3560		1.9649	5469.0	285.6	1.00	110.89	0.1255	349.3167	0.046575	_	0.009204	133.0709	16.63386
01-28-2015 18		153 2795.4			1.9760	5523.6	286.8	1.00	111.37	0.1255	350.8227	0.046776	_	0.009244	133.6446	16.70558
					1.9635	5691.3	297.4	1.00	115.48	0.1255	363.7618	0.048501	-	0.009585	138.5737	17.32171
	-				1.9685	5759.7	300.2	1.00	116.57	0.1255	367.2005	0.048959		0.009675	139.8837	17.48546
					1.9873	5773.8	298.1	1.00	115.75	0.1255	364.6152	0.048615	3.3068	0.009607	138.8988	17.36235
01-28-2015 22					1.9960	5515.4	9.887	9 6	112.08	0.1255	243 1727	0.047073		0.00303	119 307	14 91275
01-28-2015 23	137	139 2495.4	.4 0.3/20	926.3	4.0044	3001.3 4341.6	220.0	9 5	27.45 86.53	0.1255	272,5609	0.035341	_	0.007182	103.8311	12.97888
					1 9976	1787.7	194.5	1.00	75.54	0.1255	237,9606	0.031728		0.00627	90.6502	11.33127
					1.9810	3737.9	193.6	1.00	75.18	0.1255	236.806	0.031574	3,3068	0.00624	90.21036	11.27629
					1.9980	3862.4	198.3	1.00	77.02	0.1255	242.6041	0.032347	3.3068	0.006392	92.41912	11.55239
			0 0.3840		2.0139	5091.2	259.4	1.00	100.72	0.1255	317.264	0.042301		0.00836	120.8606	15.10757
01-29-2015 05	141	150 2619.5	.5 0.3560		2.0134	5274.1	268.8	1.00	104.36	0.1255	328.7473	0.043832	_	0.008662	125.2351	15.65438
01-29-2015 06	159	150 2765.8	.8 0.3420		2.0105	5560.6	283.8	1.00	110.19	0.1255	347.1079	0.04628	_	0.009146	132.2295	16.52869
01-29-2015 07	162	153 2837.1			2.0071	5694.4	291.1	1.00	113.03	0.1255	356.0561	0.047473	_	0.009382	135.6382	16.95478
01-29-2015 08	167	157 2893.7		•	2.0137	5827.1	296.9	1.00	115.29	0.1255	363.1594	0.04842	-	0.009569	138.3442	17.29303
				876.9	2.0261	5303.7	268.6	1.00	104.29	0.1255	328.5214	0.043802	3.3068	0.008656	125.149	15.64363
					2.0237	4952.3	251.1	1.00	97.49	0.1255	307.1111	0.040947	3.3068	0.008092	116,9928	14.6241
					2.0115	4819.9	245.8	1.00	95.47	0.1255	300.7231	0.040096	3.3068	0.007924	114,5594	14.31992
			1.3 0.3240		2.0083	5.5/04	702	9 5	20.82	0.1255	7//0.462	0000000	3000	0.006507	CCOTO.75	11 75916
					2.01b4	3967.7	6T07	9 5	76.13	0.1255	739 8054	0.032320		0.000000		11.41912
01-29-2015 14	66	110 1910.8		0.700 0.700 0.500	2.0178	3749.5	192.3	1.00	74.65	0.1255	235.1619	0.031354		0.006196		11.19801
					2.0173	4268.5	217.1	100	84.30	0.1255	265.5455	0.035405		0.006997		12.64482
				948.1	2.0318	5206.4	262.9	1.00	102.09	0.1255	321.5812	0.042877		0.008473	-	15.31315
01-29-2015 18				•	2.0146	5476.0	278.9	1.00	108.29	0.1255	341,1216	0.045482	3,3068	0.008988	129.949	16.24363
01-29-2015 19		151 2559.6			2.0167	5162.0	262.6	1.00	101.98	0.1255	321.2298	0.04283	3.3068	0.008464	122.3713	15.29641
01-29-2015 20					2.0229	4872.3	247.1	1.00	95.96	0.1255	302.2793	0.040303	3.3068	0.007965	115.1522	14.39402
01-29-2015 21					2.0083	4477.1	228.7	1.00	88.82	0.1255	2777.672	0.037303	3.3068	0.007372	106.5801	13.32251
01-29-2015 22					2.0126	4145.4	211.3	1.00	82.06	0.1255	258.4924	0.034465	3.3068	0.006811	98.471/1	12.30896
					2.0185	3837.6	195.1	1.00	75.75	0.1255	238.6006	0.031813	3.3058	0.006287	90.89402	21.351/5
					2.0013	3960.7	203.1	1.00	78.85	0.1255	248.3771	0.033116	3.3058	0.000344	24.01033	11.02/23
					1.9986	3739.0	191.9	9 6	74.53	0.1255	234./854	0.031304	3.3068	0.005185	89.44054	11 13884
01-30-2015 02					1.9970	3/22.2	191.2		74.20	0.1233	725 2751	2011CO.0	משטר ה	0.000100	89 64677	11 20578
					1.9919	3/33.1	4.291	3 5	74.71	0.1253	725 6763	0.031370	3000	0.00000	29.75.096	11 22012
					1.9930	3/4T.8	197.0	3 6	7.00	0.1255	• •	0.02440	3000	0.000200	109 5586	13 69487
				868.5	2/56.1	40/07	705.7	3 5	114.75	0.1255	•	0.000043	3 3068	0.009524	137.694	17,21175
				•	2.0169	0.000	C. 60.	3 5	117.00	0.1255	271 5679	0.04040	3000	0.00079	141 5474	17 69343
					2.03/4	0.32.0 777.0	303.8	F.00	112.50	0.1253	5/TC-756	0.043042	990c.c	0.00977	136 2937	17.03665
01-30-2015 08	155	157 2850.8	0.3690	1051.9	2.024/	2//5.0	C747	7.70	OC'CTT	U.24.U	t-11:100	2011	0.000	V-1000.0	TOO: COT	1

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Common Stack Common Stack Stack Heat input NOx Lb/mmBtu NOx Lb/Hr (Lb/mmBtu)	Cox Lb/mmBtu	Ommon Stack NOx Lb/Hr	ommon Stack SO2 (Lb/mmBtu)	mmon Slack Co O2 (Lb/Hr) CO	Common Stack Common Stack Unit Operation So2 (LbHr) CO2 (Tons/Hr) (minutes)		Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr) (Mercury (lb/TBtu)	Mercury (lb/hr)	HCt (lb/hr)	HF (lb/hr)
01-30-2015 09	153	158	2819.9	0.3550	1001.1	2.0465	5771.0	289.3	1.00	112.35	0.1255	353.8975	0.047186	_		134.8159	16.85199
01-30-2015 10	165	153	2881.6	0.3650	1051.8	2.0366	5868.7	295.7	1.00	114.80	0.1255	361.6408	0.048218	_	0.009529	137.7657	17.22072
	150		2715.6	0.3460	939.6	2.0333	5521.7	278.6	1.00	108.19	0.1255	340.8078	0.04544		0.00898	129.8295	16.22869
	146		2672.6	0.3620	967.5	2.0533	5487.6	274.2	1.00	106.48	0.1255	335.4113	0.044721		0.008838	12/.//3/	15.9/1/1
	149		2704.2	0.3630	981.6	2.0500	5543.6	2//2	9 5	107.74	0.1255	339.37/1 208 7598	0.04525	3.305.5	0.008542	25.2845	15.15036
01-30-2015 14	135	149	2619.6	0.3880	998.1	2.0500	4977.8	249.1	8 8	96.74	0.1255	304.7391	0.040631	-	0.00803	116.0892	14.51116
	139		2726.5	0,3790	1033.3	2.0500	5589.2	279.7	1.00	108.63	0.1255	342.1758	0.045623	_	.009016	130.3506	16.29382
	159		2885.2	0.3800	1096.4	2.0587	5939.9	296.0	1.00	114.95	0.1255	362.0926	0.048278	_	0.009541	137.9378	17.24223
01-30-2015 18	167	. 165	3006.9	0.3580	1076.5	2.0573	6186.0	308.5	1.00	119.80	0.1255	377.366	0.050315	_	0.009943	143.7562	17.96952
01-30-2015 19			2958.0	0.3540	1047.1	2.0555	6080.1	303.5	1.00	117.85	0.1255	371.229	0.049496	_	0.009781	141.4183	17.67729
	151		2835.2	0.3450	978.1	2.0493	5810.3	290.9	1.0	112.96	0.1255	355.8176	0.047442	_	0.009375	135.5474	16.94343
	151 154		2903.1	0.3440	998.7	2.0473	5943.4	5.762	99.5	115.65	0.1255	354.3391	0.048578	3.3058	3600.0	134 5291	17.3432
01-30-2015 22	161	152	2813.9	0.3510	787.7 C 080	2.0593	7,768.7	778.6	T.00	108.17	0.1255	340.7451	0.045432	_	0.008978	129.8056	16.2257
	147		2,6663	0.302.0	1007.9	2.0410	5441.9	273.6	1,00	106.23	0.1255	334.6207	0.044615	_	0.008817	127.4725	15.93406
	158		2916.4	0.3750	1093.7	2.0462	5967.6	299.2	1.00	116.19	0.1255	366.0082	0.0488		0.009644	139.4295	17.42869
	153		2776.1	0.3680	1021.6	2.0502	5691.6	284.8	1.00	110.60	0.1255	348.4006	0.046453		0.00918	132.7219	16.59024
	159		2933.8	0.3800	1114.8	2.0527	6022.3	301.0	1.00	116.88	0.1255	368.1919	0.049091	_	0.009701	140.2614	17.53267
01-31-2015 04	162	165	2962.8	0.3810	1128.8	2.0623	6110.3	304.0	1.00	118.04	0.1255	371.8314	0.049577	_	767600.0	141.6478	17.70598
01-31-2015 05	162	165	2995.8	0.3720	1114.4	2.0386	6107.3	307.4	1.00	119.35	0.1255	375.9729	0.050129	_	906600.0	143.2255	17.90319
01-31-2015 06	162			0.3750	1145.9	2.0623	6301.7	313.5	1.00	121.74	0.1255	383.4904	0.051131	_	0.010105	146.0892	18.26116
01-31-2015 07	170		3069.6	0.4120	1264.7	2.0763	6373.5	314.9	1.00	122.29	0.1255	385.2348	0.051364		0.01015	146.7538	18.34422
01-31-2015 08	170	-		0.4190	1298.2	2.0700	6413.6	317.9	1.0	123.44	0.1255	388.8492	0.051846	_	0.010246	148.1307	18.51633
01-31-2015 09	170			0.4200	1317.1	2.0578	6453.0	321.7	1.0	124.94	0.1255	393,5555	0.052473		0.01037	149.9235	18.74044
01-31-2015 10				0.4160	1278.7	2.0744	6376.2	315.4	1.00	122.46	0.1255	385.7619	0.051434	_	0.010164	146.9546	18.36932
01-31-2015 11			2959.6	0.4040	1195.7	2.0744	6139.4	303.7	7.00	17.91	0.1255	3/1.4298	0.049523	3.3068	/8/600.0	141.4948	14 95755
01-31-2015 12				0.4200	1044.5	2.0620	5128.2	255.2	8.6	80.66	0.1755	312.1185	0.041515		0.006224	100 3640	12 54562
01-31-2015 13	-			0.4170	875.4	2.0476	3750 5	215.4	3 5	83.54 43.54	0.1255	253.4522	0.035.128		0.006942	28 40398	11.0755
01-31-2015 14		100	1855.3	0.4080	1.007 7.007	CECU.2	3780.8	190.1	8 5	40.57 47.47	0.1255	7010 050	0.030961	_	0.006119	88.46056	11.05757
01-31-2015 15	8 8			0,000,0	719.7	2.0462	3858.4	193.1	9 6	74.99	0.1255	236.2161	0.031495		0.006224	89.98566	11.24821
01-31-2015 17	•			0.3600	728.5	2.0686	4185.8	207.6	1.0	80.62	0.1255	253,9493	0.033859	_	0.006691	95.74104	12.09263
				0.3630	1000.5	2.0662	5695.2	282.8	1.00	109.81	0.1255	345.9157	0.046121	3.3068	0.009114	131,7753	16.47191
01-31-2015 19	159			0.3860	1134.9	2.0529	6035.6	301.6	1.00	117.14	0.1255	368.9826	0.049197	_	0.009722	140.5625	17.57032
01-31-2015 20	159			0.3840	1152.4	2.0319	6097.8	307.9	1.00	119.57	0.1255	376.6381	0.050218	-	0.009924	143,4789	17.93486
01-31-2015 21				0.3870	1048.1	2.0217	5475.1	277.9	1.0	107.90	0.1255	339.8791	0.045316	3.3068	0.008955	129.4757	16.1844b
		-		0.4080	931.5	2.0236	4620.1	234.2	9, 6	90.95	0.1255	286.5291	0.038203	3.3058	55/00.0	2251.601	15.54402
01-31-2015 23			•	0.4360	799.0	2.0258	3712.3	188.0	3 5	73.01	0.1255	88/5.677	0.030663	90000	0.00000	000000.70	710501
02-01-2015 00				0.3790	765.2	2.0233	4085.1	207.1	9 6	80.44	0.1255	255.5845	0.033784	3.3058	0,005575	101 1442	12.005/4
02-01-2015 01				0.3790	801.8	2.0284	4.291.2	1./12	00.1	67.48	0.1255	235,0070	0.0354	33068	0.000330	89 54587	11.19323
02-01-2015 02	. 6		18/3.0	0.3810	6.617	2.0172	2.077C	183 9	9 6	71.40	0.1255	224.9086	0.029987	3.3068	0.005926	85.67809	10,70976
02-01-2015 03				0.3000	4.049	2.0121	36165	184.8	001	71.78	0.1255	226.1008	0.030146	3,3068	0.005957	86.13227	10.76653
02-01-2015 04				0.3620	662.0	1.9932	3645.2	187.6	1.00	72.86	0.1255	229.5144	0.030601	3.3068	0.006047	87,43267	10.92908
02-01-2015 06	- S6	105		0.3500	671.4	1.9829	3803.8	196.8	1.00	76.43	0.1255	240.7467	0.032099	3.3068	0.006343	91.71155	11.46394
02-01-2015 07	8 8			0.3440	685.5	1.9901	3965.8	204.5	1.00	79.39	0.1255	250.0964	0.033346	3.3068	0.00659	95.27331	11.90916

COLOMINIO (18) 111 COLOMINIO (18) 111 COLOMINIO (18) 111 COLOMINIO (18) 111 COLOMINIO (18)	УТ Date/Hour L	YT01 Gross Load MW Value	Y702 Gross C Load MW Value	Common Stack Heat Input (mmBtu)	Common Stack Common Stack Con Heat input NOx Lb/mmBu N	птоп Stack Ох Lb/Hr	Sommon Stack SQ2 (Lb/mmBtu)	Common Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)	Common Stack Common Stack Common Stack Unit Operation SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	Coal tons/hr	PM-10 ((b/mmBtu)	РМ-10 (LЪ/Нт)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCI (lb/hr)	нг (фл.)
11 11<	80	138	156	2712.0		981.7	2.0032	5432.6	.,		108.05	0.1255	340.356	0.04538		• • •	129.6574	16.20717
11 11 12 12 12 12 12 12	60	155	161	2868.9		1061.5	2.0058	5754.5			114.30	0.1255	360.047	0.048005		• •	137.1586	17.14482
111 112 <td></td> <td>164</td> <td>172</td> <td>3033.1</td> <td></td> <td>1110.1</td> <td>2.0102</td> <td>6097.2</td> <td></td> <td></td> <td>120.84</td> <td>0.1255</td> <td>380.6541</td> <td>0.050753</td> <td></td> <td>• • •</td> <td>145.0088</td> <td>18.1261</td>		164	172	3033.1		1110.1	2.0102	6097.2			120.84	0.1255	380.6541	0.050753		• • •	145.0088	18.1261
11 11<		132	135	2389.0		926.9	2.0113	3705.0			95.18	0.1255	299.8195	0.039975		0.0079	39.35936	14.27589
		107	115	2030,2		708.5	1.9821	4024.1	• • •		80.88	0.1255	254.7901	0.033971	_	9 51,0067	97.06135	12.13267
		124	137	2387.1		845.0	1.9925	4756.3			95.10	0.1255	299.5811	0.039944	_	• •		14.26554
11 11.2 12.6 26.6 20.9 20.4 20.5 30.7 10.9 30.5 30.7 10.9 30.5 30.7 10.9 30.5 30.7 10.9 30.7 10.0 30.5 30.0 30.5 30.0 30.5 30.0 30.5 30.0 30.5 30.0 30.5 30.0 30.5 30.0 30.5 30.0 30.5 30.0 30.5 30.0 30.5 30.0 3		127	141	2411.8		969.5	2.0113	4850.8		•	96.09	0.1255	302.6809	0.040357	_			14.41315
		128	. 142	2464.0		975.7	1.9945	4914.5		•	98.17	0.1255	309.232	0.04123	_		117.8008	14.7251
11 11<		142	156	2699.1		1025.7	2.0089	5422.2		•••	107.53	0.1255	338.7371	0.045164			129.0406	16.15008
13 11<		159	160	2848.2		1096.6	2.0155	5740.6		•••	113.47	0.1255	357,4491	0.047659	-	0009418	136.1689	17.02112
2 11 11 24 11 24 11 24 </td <td></td> <td>112</td> <td>119</td> <td>2072.6</td> <td></td> <td>876.7</td> <td>1.9938</td> <td>4132.3</td> <td></td> <td></td> <td>82.57</td> <td>0.1255</td> <td>260.1113</td> <td>0.034681</td> <td></td> <td></td> <td>99.08845</td> <td>12.38505</td>		112	119	2072.6		876.7	1.9938	4132.3			82.57	0.1255	260.1113	0.034681			99.08845	12.38505
11 11<		101 101	103	1865.4		677.1	1.9847	3702.2			74.32	0.1255	7/01/57	0.031214		-	115 505	11.14/01 1//3975
2. 1.1. 1		125	141	2416.0		872.2	1.9999	4831.7			27.05 24.40	227.0	303.208	0.040427			112 2727	14.45023
23 11 11.5. 12.5.		126	135	2371.4		936.7	1.9789	4692.7			84.48	0.1255	/0T9//67	1,0350.0 0,0350.0	_		1010.0107	10 70700
0 38 10 1888.7 0.340 6.25 1.934 9.94 10 7.23 0.123 23.041 0.00047 88.7 0 98 10 1883.7 0.340 62.3 1.934 9.94 10 7.23 0.125 23.041 0.00047 3.000		125	111	2129.7		851.9	1.9686	4192.5			84.85	0.1255	4//7:/07	0.033636		340,000	DO 20541	11 28705
9 100 1833.1 0.3400 0.23.2 1.03.1 1.03.2		86.8	107	1888.7		838.8	1.9458	2503 C			22.57	0.1255	233.041	0.031072	,	0.00614	88.7761	11.09701
4 5 100 135.4 200 125.4 125.4 125.4 125.4 125.4 125.4 125.4 125.4 125.4 125.5 125.0 125.5		Š	103	20001		6223	1.0001	2540.5			73.03	0.1255	230.0541	0.030673	_		87.63825	10.95478
4 5 10 18.7 0.3466 678.9 1.9448 355.3 1.65 1.0 7.247 0.1255 277.946 0.00309. 3.3068 0.00000 88.207.9 0.6 1.6 1.6 1.6 1.2 1.2 27.3496 0.03989 3.3068 0.00000 8.8.207.9 0.1 1.2 1.2 1.2 1.2 2.2 1.2 1.2 2.2 1.0 1.8.6 4.2 1.5 1.2 2.7 8.0 0.00076 1.1.3 1.0 8.8.4 1.9587 4.24.8 2.5 1.0 9.24 1.0 8.7.4 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24 1.0 9.24<		8 8	5 5	1816.8		632.2	1.9441	3532.1			72.38	0.1255	228.0084	0.030401	_		86.85896	10.85737
6 1		8 86	100	1817.7		628.9	1.9448	3535.1		•	72.42	0.1255	228.1214	0.030416	_		86.90199	10.86275
04 114 122 21955 0.340 7553 15516 42848 2253 100 87.47 0.1255 217.248 0.3086 0.00775 10.4954 07 133 134 2.244. 0.3860 96.42 1.9686 457.61 238.6 1.00 95.26 0.1255 217.724 0.03837 3.3088 0.00775 10.4954 12 13 2.246. 0.360 98.4 1.9651 47.12 2.641 1.00 95.26 0.1255 217.248 3.3088 0.00775 1.04569 13 145 128 0.3460 91.20 1.9651 47.12 2.641 1.00 95.26 0.1255 3.1088 0.00775 1.00 1.00 0.1255 1.00 0.0075 0.0075 0.0075 1.00 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0085 0.0075 0.0075 0.0085		86	100	1816.0		588.4	1.9357	3515.3			72.35	0.1255	227.908	0.030387	_	3.006005	86.82072	10.85259
07 133 1343,44 0.3890 94,2 1,956 47,61 238,5 100,2 2,255,1 100 91,28 20,125 29,1331 0.3389 3,046 1,956 47,61 2,255,1 100 91,28 0.125 20,113 0.3380 0.000 11,31 13 2,281 0.3860 91,28 1,355 4,258 100 91,28 0.125 30,011 0.0013 0.125 30,011 0.0013 0.125 30,011 0.0013 1,14,689 11 13 146 2,5346 0.3650 91,93 1,9829 2854 100 100 0.125 31,003 0.0013 1,1468 11 143 148 2,5346 0.3400 922.2 1,282 100 100 10,255 31,003 0.0083 1,1111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111 1,111		114	122	2195.5		755.3	1.9516	4284.8			87.47	0.1255	275.5353	0.036737		0.00726	104.9641	13.12052
12 12 23 23 88 4 1966 451.26 235.1 100 91.28 0.1252 81.003834 3.3068 0.007391 114.6639 13 138 2396.5 0.3500 98.74 1.9657 471.2 246.1 100 95.66 0.1255 91.0138 3.3068 0.007931 114.6693 11 13 148 2546.6 0.950 91.29 1.0085 0.1255 91.039 0.04214 3.3068 0.00331 114.6693 14 148 2546.6 0.3540 91.2 1.9890 592.6 1.00 1.025 316.09 0.04214 3.3068 0.00331 1.14.6693 1.14.6693 1.14.6693 0.1255 3.0068 0.00332 1.14.14693 0.1255 3.0068 0.00332 0.04418 3.3068 0.00933 1.14.6693 1.14.6693 0.1255 0.1259 0.00448 3.3068 0.00933 1.14.14693 1.14.6693 0.04488 0.00593 0.04418 3.3068		123	131	2324.5		904.2	1.9686	4576.1	- '		92.61	0.1255	291.7248	0.038896			111.1315	13.89143
0.0 1.8 1.4 2.986.5 0.3700 887.4 1.9651 2.656 0.1255 3.0125 3.0148 0.004334 3.0286 0.01253 3.0086 0.00383 1.00434 0.0258 3.0166 0.00484 0.00414 3.0086 0.00485 1.00414 3.0086 0.00488 0.00484 0.00414 3.0086 0.00885 1.21.176 1.0 1.3 1.48 2.54.6 0.3600 9.92.2 1.9880 5.83.2 1.00 1.00.3 0.1255 31.008 0.00488 1.00.4 3.0086 0.00885 1.21.176 1.00 1.00.3 0.1255 31.009 0.00488 1.00 1.00 0.0255 31.00 0.00488 0.00488 1.00 1.00 0.0255 31.00 0.00488 1.00 1.00 0.1255 31.00 0.00488 1.00 1.00 0.0255 0.04413 3.0086 0.00885 1.21.176 0.00488 1.00 0.0255 0.04413 3.0086 0.00488 0.00488 0.00488 <t< td=""><td></td><td>122</td><td>128</td><td>2291.1</td><td></td><td>884.4</td><td>1.9696</td><td>4512.6</td><td></td><td></td><td>91.28</td><td>0.1255</td><td>287.5331</td><td>0.038337</td><td>_ `</td><td></td><td>109.534/</td><td>13.69183</td></t<>		122	128	2291.1		884.4	1.9696	4512.6			91.28	0.1255	287.5331	0.038337	_ `		109.534/	13.69183
11 132 145 253.66 035.70 919.3 1968.3 495.7 250.40 100.9 100.1 1125 1145 253.46 035.0 919.3 1968.3 495.7 250.4 100 100.98 0.1255 318.0923 0.00414 3.008 0.00845 13.008 0.008831 12.1.1761 13 15 2680.9 0.3440 922.2 1.9840 525.2 1.00 10.58 0.1255 33.668 0.008851 12.1.1761 14 15 166 0.346 0.3460 0.3270 1.9940 520.2 1.00 10.58 0.1255 33.6483 0.04486 33.068 0.008851 12.1.176 14 14 14 14 14 16 14		128	134	2398.5		887.4	1.9651	·			95.56	0.1255	301.0118	0.040134	_ `	0.007931	114.6693	14.33367
11 133 148 25346 0.3401 9120 1.822 91029 1.00 1.0036 0.1253 33460342 9120 1.200 1.0036 0.1253 3346042 9120 1.200 1.0036 0.1253 3346042 30024 0.0036 1.00 1.0036 0.1253 334604 90000 1.000 1.158 0.1253 334604 90000 1.0000 1.158 0.1253 34606 0.00471 1.3008 0.00900 1.158 1.00 1.158 0.1253 34606 0.00900 1.158 0.1253 33606 0.00491 33068 0.00900 1.158 0.1258 337.34 0.04413 3.0060 0.00000 1.158 0.1258 37.34 0.04413 3.0060 0.000000 1.158 0.00000 1.158 0.00000 1.158 0.00000 1.158 0.000000 1.158 0.00000 1.158 0.00000 1.158 0.00000 1.158 0.00000 1.158 0.000000 1.158 0.00000 0.00000 <td>5 10</td> <td>132</td> <td>145</td> <td>2518.6</td> <td></td> <td>919.3</td> <td>1.9685</td> <td>•</td> <td></td> <td></td> <td>100.34</td> <td>0.1255</td> <td>315.0843</td> <td>0.042144</td> <td></td> <td>0.008328</td> <td>120.4112</td> <td>15.00133</td>	5 10	132	145	2518.6		919.3	1.9685	•			100.34	0.1255	315.0843	0.042144		0.008328	120.4112	15.00133
14 15 165 174 3086.8 0.3450 1120.5 1832 160 1125 365.05 0.048675 3.3068 0.009619 139.070 14 166 174 3086.8 1120.5 318.7 210 12.29 0.1255 387.394 0.051652 3.3068 0.009619 139.079 15 16 174 16 175 175 176 177 176 177 310.2 30.000 177 310.2 30.000 31.200 </td <td></td> <td>133</td> <td>148</td> <td>2534.6</td> <td></td> <td>915.0</td> <td>1.9829</td> <td></td> <td></td> <td></td> <td>100.98</td> <td>0.1255</td> <td>318.0923</td> <td>0.042412</td> <td></td> <td>J.008581</td> <td>121.1751</td> <td>15.14/01</td>		133	148	2534.6		915.0	1.9829				100.98	0.1255	318.0923	0.042412		J.008581	121.1751	15.14/01
13 165 296.9 0.3520 103.59 19940 2880.4 286.5 100 11.25 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.125 387.9 0.087.1 1.00 1.00 1.00 0.125 387.30 0.087.1 1.25 1.00 1.00 0.125 387.90 0.087.1 1.00 1.00 1.00 0.125 387.90 0.087.1 1.00 1.00 1.00 0.125 387.90 0.087.1 1.00 1.00 1.00 0.125 387.90 0.00 0.00 0.125 387.90 0.00 0.00 0.125 387.90 0.00 0.00 0.125 387.90 0.00 0.00 0.125 387.90 0.00 0.00 <td></td> <td>145</td> <td>153</td> <td>2680.9</td> <td></td> <td>922.2</td> <td>1.9890</td> <td>- •</td> <td>•</td> <td></td> <td>106.81</td> <td>0.1255</td> <td>335.455</td> <td>0.04486</td> <td></td> <td>0.000889</td> <td>CD/T.97T</td> <td>10,02131</td>		145	153	2680.9		922.2	1.9890	- •	•		106.81	0.1255	335.455	0.04486		0.000889	CD/T.97T	10,02131
14 160 174 30000 1353 1103 1203 1103 1203 1150 11		158	165	2908.9		1023.9	1.9940	5800.4				0.1255	365.05/	0.0486/5		707010	147 5761	18 44701
14 150 2000 20	41.4	16/	1/4	3080.2		675	1.3022	5208				0.1255	330.8557	0.044113		0.008718	126.0382	15.75478
1 1	0 7 0 4	138	£ 55	2608.0		931.1	1.9882					0.1255	327.304	0.04364	_	0.008624	124.6853	15.58566
18 166 173 3051.0 0.3440 1049.5 2.0028 6110.6 313.0 100 121.55 362.905 0.051053 3.3068 0.010089 145.8645 19 171 176 3108.3 0.3560 1106.6 2.0112 6251.5 318.9 1.00 123.84 0.1255 390.0917 0.052011 3.3068 0.10107 148.604 20 172 175 3117.0 0.3590 1119.0 2.017 628.1 100 124.18 0.1255 390.091 0.05201 130.007 148.604 21 172 175 310.0 0.3590 1103.8 2.017 627.13 319.0 10.055 390.091 0.05201 33068 0.1037 148.60 148.60 22 161 163 280.0 1103.8 2.017 627.13 319.0 10.155 390.043 3.068 0.01037 148.0019 23 161 163 183 2.018 2.018 <t< td=""><td>17</td><td>190</td><td>167</td><td>2935.0</td><td></td><td>989.1</td><td>1.9970</td><td></td><td></td><td>•</td><td></td><td>0.1255</td><td>368.3425</td><td>0.049112</td><td>_</td><td>0.009705</td><td>140.3187</td><td>17.53984</td></t<>	17	190	167	2935.0		989.1	1.9970			•		0.1255	368.3425	0.049112	_	0.009705	140.3187	17.53984
19 171 176 3108.3 0.3560 1106.6 2.0112 625.1.5 318.9 100 123.84 0.1255 390.0917 0.052011 3.3068 0.101273 148.604 20 172 175 311.0 0.3590 1119.0 2.0077 6258.1 319.8 1.00 124.18 0.1255 390.0917 0.05217 3.3068 0.010307 149.0199 21 172 175 310.2 0.3590 1193.8 2.0170 627.13 319.0 1.025 390.0917 0.05205 3.3068 0.010307 149.0199 22 161 183 2422.3 0.3880 915.1 1.9942 484.3 1.00 91.45 0.1255 380.0693 3.3068 0.009504 137.00 23 115 124.2 123 242.3 1.9942 484.3 235.9 1.00 91.45 0.1255 385.496 0.06933 3.3068 0.00970 13.4072 24 110 124.1	15 18	166	173	3051.0		1049.5	2.0028			•		0.1255	•••	0.051053	_	0.010089	145.8645	18.23307
20 172 175 317.0 0.3590 119.0 2.0077 6258.1 319.8 1.00 124.18 0.1255 391.835 0.052157 3.3068 0.013307 149.01390 21 172 175 3109.2 0.3550 1103.8 2.0170 6271.3 319.0 1.025 390.066 0.05205 3.3068 0.01330 149.0139 22 161 183 2422.3 0.3590 1.038 2.018 244.9 1.00 14.51 0.1255 36.0396 0.08093 13.4697 1.00 14.51 0.1255 36.0396 0.08093 13.4607 1.00 14.51 0.1255 36.0398 0.00593 13.407 1.00 14.51 0.1255 36.0493 3.3068 0.00990 13.407 1.00 14.51 0.1255 36.0493 3.3068 0.00990 13.407 1.00 14.51 0.1255 36.0493 3.3068 0.00990 13.407 11.509 1.00 14.51 0.1255 38.6498 0.		171	176	3108.3		1106.6	2.0112	6251.		•		0.1255	390.0917	0.052011	_	0.010278	148.604	18.5755
21 172 175 3109.2 0.3550 1103.8 2.0170 6271.3 319.0 10.0 123.87 0.1253 390.2446 0.052026 3.3068 0.010281 148.647 22 161 163 2874.1 0.3590 1031.8 2.0182 580.6 24.9 1.00 144.51 0.1253 36.6996 0.040533 3.3068 0.00801 11.48.647 23 136 138 249.2 1.982 248.5 1.00 144.51 0.1255 36.6996 0.040533 3.3068 0.00801 11.48.647 01 114 2299.2 0.3980 915.1 1.9941 458.48 1.00 91.60 0.1255 28.5496 0.0833 3.3068 0.00901 115.4092 11 114 2052.1 0.4130 782.8 1.994 499.2 21.05 1.00 91.55 28.536 0.03433 33.068 0.006783 110831 12 12 13 243.0 28.93		172	175	3117.0			2.0077	6258.		••		0.1255	•••	0.052157	_	0.010307	149.0199	18.62749
22 161 163 2874.1 0.3590 1031.8 2.0182 580.6 249 1.00 114.51 0.1255 360.6996 0.048033 3.3068 0.005004 137.4072 23 136 138 2472.3 0.3880 999.9 1.9982 4840.3 248.5 1.00 91.51 0.1255 38.6987 0.04083 3.3068 0.00503 137.407 00 115 134 209.2 0.3990 15.1 1.9941 484.3 1.00 91.60 0.1255 288.296 0.038473 3.3068 0.00503 199210 01 111 114 1919.5 0.4130 78.2 1.9942 210.5 1.00 91.60 0.1255 287.496 0.03433 3.3068 0.006783 10.99219 02 110 110 110 110 1.00 1.04 0.1255 287.4978 0.037119 3.3068 0.006783 19.10831 03 12 12 12 12 <td></td> <td>172</td> <td>175</td> <td>3109.</td> <td></td> <td></td> <td>2.0170</td> <td></td> <td></td> <td>•</td> <td></td> <td>0.1255</td> <td></td> <td>0.052026</td> <td>_</td> <td>0.010281</td> <td>148.647</td> <td>18.58088</td>		172	175	3109.			2.0170			•		0.1255		0.052026	_	0.010281	148.647	18.58088
136 133 2422.3 0.3880 939.9 1.9982 4840.3 248.5 1.00 96.51 0.1255 303.9887 0.040533 3.3068 0.00801 115.8072 00 115 137 2299.2 0.3880 915.1 1.9941 4584.8 235.9 1.00 91.60 0.1255 288.5496 0.038473 3.3068 0.007603 10.9212 01 111 114 2052.1 0.4000 820.8 1.9942 4092.2 210.5 1.00 91.60 0.1255 288.5496 0.038473 3.3068 0.007603 10.9212 02 104 1919.5 0.4130 792.8 1.992 210.5 1.00 81.76 0.1255 287.38 0.03438 3.3068 0.007785 19.9313 03 119 120 243.0 1.00 76.7 0.1255 27.4976 0.03733 3.3068 0.007785 19.4948 04 125 126.8 0.3760 822.3 2.0107 </td <td>15 22</td> <td>161</td> <td>163</td> <td>2874.</td> <td></td> <td></td> <td>2.0182</td> <td></td> <td></td> <td></td> <td></td> <td>0.1255</td> <td></td> <td>0.048093</td> <td>_</td> <td>0.009504</td> <td>137.4072</td> <td>17.1759</td>	15 22	161	163	2874.			2.0182					0.1255		0.048093	_	0.009504	137.4072	17.1759
00 115 137 2299.2 0.3980 915.1 1.9941 4584.8 235.9 1.00 91.60 0.1255 288.5496 0.038473 3.3068 0.007603 109.9319 0.1 111 114 2052.1 0.4000 820.8 1.9942 4092.2 210.5 1.00 81.76 0.1255 275.386 0.034338 3.3068 0.006785 98.10837 0.2 104 104 1919.5 0.4130 792.8 1.982 3818.3 196.9 1.00 81.76 0.1255 275.386 0.03438 3.3068 0.006785 98.10837 0.3 104 1919.5 0.4130 829.8 1.9972 4384.3 225.2 1.00 87.46 0.1255 274.976 0.03793 3.3068 0.007759 104.948 0.4 125 126.8 0.3760 822.3 2.0107 4557.9 1.00 90.31 0.1255 284.4834 0.03791 1.0498 1.00 90.31 0.1255	15 23	136	133	2422.				•		•		0.1255	•••	0.040533		0.00801	115.8072	14.4759
01 111 114 2052.1 0.4000 820.8 1.9942 4092.2 210.5 1.00 81.76 0.1255 257.5386 0.034338 3.3068 0.0065785 98.10837 02 104 104 1919.5 0.4130 792.8 1.9892 3818.3 196.9 1.00 76.47 0.1255 257.5386 0.032119 3.3068 0.0065785 98.10837 03 119 120 2195.2 0.3780 829.8 1.9972 4384.3 225.2 1.00 87.46 0.1255 275.4976 0.035732 3.3068 0.005347 91.78992 04 125 125 2266.8 0.3760 852.3 2.0107 4557.9 232.6 1.00 90.31 0.1255 284.4834 0.037931 3.3068 0.007496 108.3729 05 139 142 2589.8 0.3480 901.3 1.9920 5158.9 265.7 1.00 103.18 0.1255 325.0199 0.043335 3.3068 0.008564 123.8151 06 162 162 165 2960.8 0.3560 1054.0 2.0117 5956.3 303.8 1.00 117.96 0.1255 371.5804 0.049543 3.3068 0.009791 141.5522	15 00	115	137	2299.				•		•		0.1255	•	0.038473	_	0.007603	109.9219	13.74024
02 104 104 1919.5 0.4130 792.8 1.9892 3818.3 196.9 1.00 76.47 0.1255 240.8973 0.032119 3.3068 0.005.47 91.78892 03 119 120 2195.2 0.3780 829.8 1.9972 438.43 225.2 1.00 87.46 0.1255 275.4976 0.035732 3.3068 0.007759 104.9498 04 125 125 2266.8 0.3760 852.3 2.0107 4557.9 232.6 1.00 90.31 0.1255 275.4976 0.037931 3.3068 0.007495 108.3729 05 139 142 2589.8 0.3480 901.3 1.9920 5158.9 265.7 1.00 103.18 0.1255 325.0199 0.043335 3.3068 0.008564 123.8151 05 162 165 2960.8 0.3560 1054.0 2.0117 5956.3 303.8 1.00 117.96 0.1255 371.5804 0.049543 3.3068 0.009791 141.5522		111	114	2052.			, -					0.1255		0.034338	3.3068	0.006/85	98.10837	55562.21
03 119 120 2195.2 0.3780 829.8 1.9972 4384.3 225.2 1.00 87.46 0.1255 275.4976 0.036732 3.3068 0.007259 104.9498 0.04 125 126.8 0.3760 852.3 2.0107 4557.9 232.6 1.00 90.31 0.1255 284.4834 0.037931 3.3068 0.007496 108.3729 0.05 139 142 2589.8 0.3480 901.3 1.9920 5158.9 265.7 1.00 103.18 0.1255 235.0199 0.043335 3.3068 0.008564 123.8151 0.05 162 165 2960.8 0.3560 1054.0 2.0117 5956.3 303.8 1.00 117.96 0.1255 371.5804 0.049543 3.3068 0.009791 141.5522	5 02	104	104	1919.						•		0.1255		0.032119	3.3068	0.005347	7689/16	11.4/112
04 125 125 226.8 0.3760 852.3 2.0107 4557.9 232.6 1.00 90.31 0.1255 284,4834 0.037931 3.3068 0.007495 108.3729 05 139 142 2589.8 0.3480 901.3 1.5920 5158.9 265.7 1.00 103.18 0.1255 325.0199 0.043335 3.3068 0.008564 123.8151 06 162 165 2960.8 0.3560 1054.0 2.0117 5956.3 303.8 1.00 117.96 0.1255 371.5804 0.049543 3.3068 0.009791 141.5522		119	120	2195.			1.9972	4384.	_	• •		0.1255		0.036732	3.3068	0.007259	104,9498	13.11873
05 139 142 2589.8 0.3480 901.3 1.5920 5158.9 265.7 1.00 103.18 0.1255 3.5.0199 0.04335 5.3068 0.008794 123.8151 06 162 165 2960.8 0.3560 1054.0 2.0117 5956.3 303.8 1.00 117.96 0.1255 371.5804 0.049543 3.3068 0.009791 141.5522		125	125	2266.8			2.0107	4557.	_	•		0.1255	284,4834	0.037931	3.3068	0.007496	108.3729	13.54551
06 162 165 2960.8 0.3560 1054.0 2.0117 5956.3 303.8 1.00 117.96 0.1255 371.5804 0.049543 3.3068 0.009791 141.5522	5 05	139	142	2589.8			1.9920	5158.		.,		0.1255	325.0199	0.043335	3.3068	0.008564	173.8151	15.47689
		162	165	2960.8		••	2.0117	5956.		•		0.1255	371.5804	0.049543	3.3068	16/600.0	141.5522	17.69402

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 | 45 | 90 | 9/ | 8 1 | 7 1
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| HF (lb/hr | 18.415 | 18.566 | 18.02 | 16.228 | 12 690 | 13,659 | 11.720 | 10.64
 | 12.587 | 15.00 | 17.958 | 17.905 | 1/3/0
 | 18.102 | 11 498 | 10.95 | 10.946 | 10.707 | 10.62
 | 10.743 | | | 17.656

 | 16.740 | 11 200
 | 10.819 | 10.863 | 10.890 | ٠, | ٠.

 | | | | |
 | - | | | | | 11.021
 | | 11.83924 |
| HCI (Ib/hr) | 147.3275 | 148.5323 | 144.1912 | 129.8295 | 100 4430 | 109.2765 | 93.76255 | 85.19522
 | 100.6996 | 120.0048 | 143.6701 | 143.2446 | 143./65/
 | 144.8223 | 91 98405 | 87.60478 | 87,57131 | 85.66375 | 84.9992
 | 85.94582 | 104.4956 | 136.1689 | 141.2558

 | 133.9219 | 05 19735
 | 86.55777 | 86.90677 | 87.12669 | 86,48127 | 86.66295

 | 85.79761 | 92.30438 | 111.0598 | 110.1227 | 10/.54/4
 | 100.9004 | 90.0095 | 86.35219 | 85.83108 | 86.17052 | 88.17371
 | 86.56733 | 94.71394 |
| Mercury
(lb/hr) | 0.01019 | 0.010273 | 0.009973 | 0.00898 | 70,000,0 | 0.007558 | 0.006485 | 0.005893
 | 0.006965 | 0.0083 | 0.009937 | 0.009908 | 0.009944
 | 0.01001/ | 0.000000 | 0.006059 | 0.006057 | 0.005925 | 0.005879
 | 0.005945 | 0.007228 | 0.009418 | 0.00977

 | 0.009263 | 0.007053
 | 0.005987 | 0.006011 | 0.006026 | 0.005982 | 0.005994

 | 0.005934 | 0.006384 | 0.007682 | 0.007617 | 0.00/466
 | 0.006979 | 0.006255 | 0.005973 | 0.005937 | 0.00596 | 0.006099
 | 0.005988 | 0.006551 |
| Mercury
(Ib/TBtu) | 3.3068 | 3.3068 | 3.3068 | 3.3068 | 00000 | 3.3068 | 3.3068 | 3.3068
 | 3.3068 | 3.3068 | 3.3068 | 3.3068 | 3.3068
 | 3.3068 | 3,3068 | 3,3068 | 3.3068 | 3.3068 | 3.3068
 | 3.3068 | 3.3068 | 3.3068 | 3.3068

 | 3.3068 | 2 2068
 | 3,3068 | 3.3068 | 3.3068 | 3.3068 | 3.3068

 | 3.3068 | 3.3068 | 3.3068 | 3.3068 | 3.3068
 | 3,3068 | 3.3068 | 33068 | 3.3068 | 3.3068 | 3.3068
 | 3.3068 | 3.3068 |
| ead (lb/hr) | 0.051565 | 0.051986 | 0.050467 | 0.04544 | 200000 | 0.038247 | 0.032817 | 0.029818
 | 0.035245 | 0.042002 | 0.050285 | 0.050136 | 0.050318
 | 0.050688 | 0.044010 | 0.030662 | 0.03065 | 0.029982 | 0.02975
 | 0.030081 | 0.036573 | 0.047659 | 0.04944

 | 0.046873 | 0.035316
 | 0.030295 | 0.030417 | 0.030494 | 0.030268 | 0.030332

 | 0.030029 | 0.032307 | 0.038871 | 0.038543 | 0.03//82
 | 0.035315 | 0.031503 | 200000 | 0.030041 | 0.03016 | 0.030861
 | 0.030299 | 0.03315 |
| - | 386.7408 | 389.9034 | 378.508 | 340.8078 | 2007.000 | 286.8554 | 246.1306 | 223.641
 | 264.3407 | 315.0176 | 377.1401 | 376.0231 | 377.3911
 | 380.1646 | 201.1132 | 229.9862 | 229.8784 | 224.8709 | 223.1265
 | 225.6114 | 274.3054 | 357.4491 | 370.8023

 | 351.5506 | 207.762
 | 8712722 | 228.1339 | 228.7112 | 227.017 | 227.4939

 | 225.223 | 242.3029 | 291.5365 | 289.0767 | 283.3665
 | 264.8678 | 48/7.957 | 70,6,5781 | 725.3102 | 226.2012 | 231,4597
 | 227.2429 | 248.6281 |
| PM-10
b/mm8tu) | 0.1255 | 0.1255 | | | 0 1366 | 0.1255 | 0.1255 | 0.1255
 | 0.1255 | 0.1255 | 0.1255 | 0.1255 | 0.1255
 | | | 0.1255 | 0.1255 | 0.1255 | 0.1255
 | 0.1255 | 0.1255 | 0.1255 | 0.1255

 | 0.1255 | 0.1235
 | 0.1255 | 0.1255 | 0.1255 | 0.1255 | 0.1255

 | 0.1255 | 0.1255 | 0.1255 | 0.1255 | 0.1255
 | 0.1255 | 0.1255 | 0.1255 | 0.1255 | 0.1255 | 0.1255
 | 0.1255 | 0.1255 |
| | 122.77 | 123.78 | 120.16 | 108.19 | 10.10 | 91.06 | 78.14 | 71.00
 | 83.92 | 100.00 | 119.73 | 119.37 | 119.80
 | 120.69 | 76.65 | 73.00 | 72.98 | 71.39 | 70.83
 | 71.62 | 87.08 | 113.47 | 117.71

 | 111.60 |)
)
)
)
 | 72.13 | 72.42 | 72.61 | 72.07 | 72.22

 | 71.50 | 76.92 | 92.55 | 91.77 | 89.96
 | 84.08 | 10.47 | 71 96 | 71.53 | 71.81 | 73.48
 | 72.14 | 78.93 |
| Operation Co | 1.00 | 1.00 | 1.00 | 8 6 | 9 6 | 8 6 | 1.00 | 1.00
 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00
 | 3 6 | 3 5 | 00.1 | 1.00 | 1.00 | 1.00
 | 1.00 | 1.00 | 1.00 | 1.00

 | 1.00 | 9 6
 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00

 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00
 | 9 5 | B 5 | 3 5 | 100 | }
10
10 | 100
 | 1.00 | 1.00 |
| Tons/Hr) (m | 316.2 | 318.8 | 309.4 | 278.6 | 27.0.0 | 234.5 | 201.2 | 182.8
 | 216.1 | 257.5 | 308.3 | 307.4 | 308.5
 | 310.8 | C.C02 | 1880 | 187.9 | 183.8 | 182.4
 | 184.4 | 224.3 | 292.2 | 303.1

 | 287.4 | 0.642
 | 185.8 | 186.5 | 187.0 | 185.6 | 186.0

 | 184.1 | 198.1 | 238.3 | 236.3 | 231.7
 | 216.5 | 193.2 | C / 0T | 184.7 | 184.9 | 189.2
 | 185.8 | 203.3 |
| on Stack Comm
(Lb/Hr) CO2 | 6240.4 | 6247.0 | 6089.7 | 5416.9 | 3160.4 | 4491.1
4442.1 | 3791.6 | 3477.1
 | 4111.6 | 4940.7 | 5932.7 | 5944.9 | 5953.5
 | 6005.0 | 7.007c | 3552.1 | 3563.7 | 3473.3 | 3457.9
 | 3458.6 | 4232.6 | 5579.1 | 5767.2

 | 5437.0 | 45/ L.D
 | 7.0100 | 3443.2 | 3450.7 | 3456.9 | 3447.4

 | 3424.1 | 3678.4 | 4421.2 | 4381.7 | 4304.4
 | 4034.0 | 3565.7 | 0,000
0,000
0,000 | 4.7666
4.195F | 3397.1 | 3478.5
 | 3388.4 | 3743.7 | | | | | | |
| SO2 | | | | | | | |
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 | | |
| SO2
(Lb/mmBtu) | 2.0251 | 2.0108 | 2.0191 | 1.9947 | 1.3000 | 1.9434 | 1.9333 | 1.9512
 | 1.9520 | 1.9683 | 1.9742 | 1.9841 | 1.9798
 | 1.9824 | 1.3000 | 1,9385 | 1.9456 | 1.9384 | 1.9449
 | 1.9239 | 1.9365 | 1.9588 | 1.9519

 | 1.9410 | L'3233
 | 1 8965 | 1.8942 | 1.8935 | 1.9111 | 1.9018

 | 1.9080 | 1.9052 | 1.9032 | 1.9023 | 1.9064
 | 1.9114 | 1.8939 | 1.000.1 | 1 8890 | 1.8848 | 1.8861
 | 1.8713 | 1.8897 |
| Mmon Stack | 1097.0 | 1096.7 | 1061.6 | 923.3 | 1002.0 | 868.6 | 776.6 | 712.8
 | 7.66.7 | 923.7 | 1060.8 | 1051.7 | 1031.4
 | 1075.4 | 760.0 | 645.0 | 641.1 | 628.9 | 631.2
 | 622.0 | 815.3 | 1088.0 | 1134.6

 | 1008.4 | U.400
 | 756.8 | 734.4 | 732.6 | 732.6 | 736.0

 | 735.8 | 7.47.2 | 854.9 | 861.5 | 842.2
 | 799.9 | 643.9 | 609 7 | 615.8 | 611.0 | 603.1
 | 610.2 | 651.8 |
| nmon Stack Co | 0.3560 | 0.3530 | 0.3520 | 0.3400 | 0.000 | 0.3800 | 0.3960 | 0.4000
 | 0.3640 | 0.3680 | 0.3530 | 0.3510 | 0.3430
 | 0.3550 | 00/00 | 0.3500 | 0.3500 | 0.3510 | 0.3550
 | 0.3460 | 0.3730 | 0.3820 | 0.3840

 | 0.3600 | 0.5820
 | 0.4180 | 0.4040 | 0.4020 | 0.4050 | 0.4060

 | 0.4100 | 0.3870 | 0.3680 | 0.3740 | 0.3730
 | 0.3790 | 0.3420 | 0,000 | 0.55.0 | 0.3390 | 0.3270
 | 0.3370 | 0.3290 |
| sat Input NO | 3081.6 | 3106.8 | 3016.0 | 2715.6 | 2002 | 2289.2 | 1961.2 | 1782.0
 | 2106.3 | 2510.1 | 3005.1 | 2996.2 | 3007.1
 | 3029.2 | 1930.4 | 1837.4 | 1831.7 | 1791.8 | 1777.9
 | 1797.7 | 2185.7 | 2848.2 | 2954.6

 | 2801.2 | 2368.8
 | 1810 5 | 1817.8 | 1822.4 | 1808.9 | 1812.7

 | 1794.6 | 1930.7 | 2323.0 | 2303.4 | 2257.9
 | 2110.5 | 1882.7 | 1806.7 | 1795.3 | 1802.4 | 1844.3
 | 1810.7 | 1981.1 |
| | 176 | 176 | 172 | 158 | 7 ; | 131 | 112 | 101
 | 121 | 149 | 176 | 176 | 176
 | 176 | 200 | 106 | 105 | 66 | 66
 | 66 | 122 | 161 | 171

 | 164 | F 1
 | 1 5 | 100 | 100 | 100 | 100

 | 100 | 109 | 135 | 134 | 131
 | 122 | 107 | 1 P | 3 5 | 100 | 100
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| Load MW
Value | 171 | 171 | 167 | 150 | G ; | 124 |] 8
6 | 98
 | 115 | 136 | 169 | 170 | 170
 | 170 | 1 5 | 60 8
60 8 | 8 | 86 | 88
 | 86 | 118 | 158 | 167

 | 158 | DE 1
 | 5 | 9 8 | 100 | 66 | 8

 | 66 | 105 | 125 | 125 | 123
 | 116 | <u> </u> | ν o | 7 8 | 7 66 | 103
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| | 02-03-2015 07 | 02-03-2015 08 | | | | | |
 | | 02-03-2015 17 | 02-03-2015 18 | |
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 | 02-04-2015 16 | 02-04-2015 17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
 | | 02-04-2015 22 | | | |
 | 02-05-2015 04 | 02-05-2015 05 |
| | Load MW Load MW Value | Date Hour Load MW Lear Industrial Nox Librir (Librimingtal) (Industrial Value Imm8tu) (Minutes) 176 3081.6 0.3560 1097.0 2.0251 6240.4 316.2 1.00 122.77 0.1255 386.7408 0.051565 3.3068 0.01019 147.3275 | Darechour Load MW Heating Nox Library Librar | Describor 103 (14) (15) (15) (15) (15) (15) (15) (15) (15 | Colorado Colorado | Description Load WW Load WW | Color Colo | Part Description Load Way Load Way Load Way Load Was Load Way Load Way | Part Part | Part Description Load Way Load Way | Part Load Miles Load Mile | Coording Marching Lead MW Common Stack Common Stack Common St | Coordination (Control Stack) Common Stack (Common Stack) < | Cond-th-Light (Light) Condition Stack (Common Stack Common Stack (Common Stack Common Stack Co | Continue Continue | Observious Local BMS Percenting Control BMS < | Liasa Maria Liasa Liasa Maria Liasa Liasa Maria Liasa Liasa | Constitute Con | Continuity Con | Cond-3-bird Heart Fight Heart Fight Cond-10-bird Media Media | Table Tab | Long Hole Lon | Co.Co2.015 Linead May (Marchen) Linead May (Marchen) March Logard May (Marchen) P (Marchen) March Logard May (Marchen) <t< th=""><th> This parameter Thi</th><th> Control Cont</th><th> Color-broad Color-broad </th><th>CD-0-2-101s Liazd Move, Avane, Avane, Liazd Move, Avane, Avane, Liazd Move, Avane, Liazd Liazd Liazd Move, Avane, Liazd Liaz</th><th>Columnity (A) Limit (A) High (A)</th><th> </th><th>CD-5-2015 11 15 CD-5-2015 CD-5-2015<!--</th--><th>Colorabitis 1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0</th><th> Part Part </th><th> Part Part </th><th> </th><th>CLOCA-COLIG (2014) (1914)</th><th>CD-05-D115 Name Control (1988) Control (1988)</th><th>CD-0-2-11 (1) Annie (1)</th><th>CD-50-101 VI Name (A) Approximated (Controlled) Controlled (Controlled) <</th><th>CD-5-2012 G 11. Value Columno (Columno (Column</th><th> Particular Par</th><th> Part Part </th><th>October 10 (1987) Apple (1</th><th> </th></th></t<> | This parameter Thi | Control Cont | Color-broad Color-broad | CD-0-2-101s Liazd Move, Avane, Avane, Liazd Move, Avane, Avane, Liazd Move, Avane, Liazd Liazd Liazd Move, Avane, Liazd Liaz | Columnity (A) Limit (A) High (A) | | CD-5-2015 11 15 CD-5-2015 CD-5-2015 </th <th>Colorabitis 1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0</th> <th> Part Part </th> <th> Part Part </th> <th> </th> <th>CLOCA-COLIG (2014) (1914)</th> <th>CD-05-D115 Name Control (1988) Control (1988)</th> <th>CD-0-2-11 (1) Annie (1)</th> <th>CD-50-101 VI Name (A) Approximated (Controlled) Controlled (Controlled) <</th> <th>CD-5-2012 G 11. Value Columno (Columno (Column</th> <th> Particular Par</th> <th> Part Part </th> <th>October 10 (1987) Apple (1</th> <th> </th> | Colorabitis 1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0 | Part Part | Part Part | | CLOCA-COLIG (2014) (1914) | CD-05-D115 Name Control (1988) Control (1988) | CD-0-2-11 (1) Annie (1) | CD-50-101 VI Name (A) Approximated (Controlled) Controlled (Controlled) < | CD-5-2012 G 11. Value Columno (Columno (Column | Particular Par | Part Part | October 10 (1987) Apple (1 | |

0.00.00.00.00.00.00.00.00.00.00.00.00.0	DaveHour	YT01 Gross Load MW Value	YT02 Gross (Loed MW Value	Common Stack Heat Input (mmBtu)	Common Stack Common Stack Comr Heat Input NOX LofremBits NO	non Stack x Lb/Hr	Common Stack SO2 (LNmmBtu)	Sommon Stack Common Stack Common Stack Unit Operation SQ2 SQ2 (LbHr) CQ2 (TonsHr) (minutes)	common Stack (CO2 (Tons/Hr)	<u> </u>	Coal tons/hr	РМ-10 ((b/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (Ib/hr)	HCI (lb/hr)	HF (lb/hr)
0 148 111 275.2 0.025.0 112.5 11.0 11.05.5		138	141	2494.3	0.3740	932.9	1.9197	4788.3	255.9	1.00	99.37	0.1255		0.041737	_	0.008248	119.2494	14.90618
0. 13.5 14.5 25.2.2 0.05.9 15.2.2 0.05.9 15.2.2 0.05.9 15.2.2 0.05.9 15.2.2 0.05.9 15.2.2 0.05.9 15.2.2 0.05.9 15.2.2 15.2.2 0.05.9 15.2.2		148	151	2639.4	0.3900	1029.4	1.9379	5114.9	270.8	1.00	105.16	0.1255	331.2447	0.044165	_	0.008728	126.1865	15.77331
		127	136	2372.5	0.4250	1008.3	1.9133	4539.3	243.4	6 6	94.52	0.1255		0.039699		0.007845	113.4263	14.17829
		155	167	2518.4		1053.1	1.9425	485b./ 5604.8	296.0	1.00	114.95	0.1255	,	0.04828		0.009541	137.9426	17.24283
		168	171	3015.3		1082.5	1.9457	5867.0	309.4	1.00	120.13	0.1255	378.4202	0.050455	3.3068	0.009971	144.1578	18.01972
		158	164	2851.6		1049.4	1.9425	5539.3	292.6	1.00	113.61	0.1255	357.8758	0.047716	3.3068	0.00943	136.3315	17.04143
		145	150	2594.1	0.3790	983.2	1.9391	5030.3	266.2	1.00	103.35	0.1255	1,,,	0.043407	_	0.008578	124.0207	15.50259
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		129	136	2344.7		921.5	1.9406	4550.2	240.6	1.00	93.41	0.1255	• •	0.039234	_	0.007753	112.0972	14.01215
11 11<		123	132	2291.6		873.1	1.9393	4444.2	235.1	1.00	91.30	0.1255	•••	0.038345	_	0.007578	109.5586	13.69482
14 14<	115 16	120	126	2210.4		829.8	1.9515	4313.6	226.8	1.00	88.06	0.1255		0.036987	-	0.007309	105.6765	13.20956
18 18<	015 17	145	160	2718.8		1033.1	1.9631	5337.2	279.0	1.00	108.32	0.1255	,	0.045494		0.00899	129.9825	16.24781
	015 18	163	171	2962.6		1099.1	1.9739	5848.0	304.0	8.5	118.03	0.1255	, -	0.0495/3		0.009797	141.5382	18 20478
7. 7.<		E 1	175	3040.5		1163.1	1 9787	6040.6	713.7	9 6	171.63	0.1255		0.051083		0.010095	145,9506	18.24382
2. 1.0		170	175	3040.1		1137.0	1 9836	6030.2	311.9	1.00	121.12	0.1255	• • • • • • • • • • • • • • • • • • • •	0.05087	3.3068	0.010053	145.3434	18,16793
15 16 18 2911 0.0867 1.9847 1.9847 1.9847 1.9847 1.9847 1.9847 1.9847 1.9847 1.9847 1.9847 1.9847 1.9847 1.0847 1.9849 1.9847 1.9847 1.0847 1.9849 1.9847 1.9847 1.0847 1.0848 1.0448 1.0448 <		0,7	176	3063.8		1130.5	1.9715	6040.3	314.3	1.00	122.06	0.1255		0.051267	3.3068	0.010131	146.4765	18.30956
0.0 1.0 2.68.7 2.88.7 1.0 0.0 99.11 0.0 1.0 <th< td=""><td></td><td>164</td><td>169</td><td>2921.5</td><td></td><td>1098.5</td><td>1.9941</td><td>5825.7</td><td>299.8</td><td>1.00</td><td>116.39</td><td>0.1255</td><td></td><td>0.048886</td><td>_</td><td>0.009661</td><td>139.6733</td><td>17.45916</td></th<>		164	169	2921.5		1098.5	1.9941	5825.7	299.8	1.00	116.39	0.1255		0.048886	_	0.009661	139.6733	17.45916
0.0 1.5 <td></td> <td>132</td> <td>149</td> <td>2488.7</td> <td></td> <td>970.6</td> <td>1.9935</td> <td>4961.2</td> <td>255.3</td> <td>1.00</td> <td>99.15</td> <td>0.1255</td> <td>•••</td> <td>0.041644</td> <td></td> <td>0.00823</td> <td>118.9817</td> <td>14.87271</td>		132	149	2488.7		970.6	1.9935	4961.2	255.3	1.00	99.15	0.1255	•••	0.041644		0.00823	118.9817	14.87271
0.0 1.0 1.61 2.956.4 0.1867.0 1.00.4 1.0.5 1.1.5 3.0.85.8 0.000897 1.3.55.8 1.3.0.8 0.000897 1.3.9.8 0.000897 1.3.9.8 0.000897 1.3.0.8 0		139	169	2910.4		1027.4	2.0002	5821.4	298.6	1.00	115.95	0.1255		0.0487		0.009624	139.1426	17.39283
0.0 1.0 <td></td> <td>170</td> <td>161</td> <td>2926.4</td> <td></td> <td>1074.0</td> <td>2.0107</td> <td>5884.2</td> <td>300.3</td> <td>1.00</td> <td>116.59</td> <td>0.1255</td> <td></td> <td>0.048968</td> <td></td> <td>0.009677</td> <td>139.9076</td> <td>17.48845</td>		170	161	2926.4		1074.0	2.0107	5884.2	300.3	1.00	116.59	0.1255		0.048968		0.009677	139.9076	17.48845
04 161 164		170	173	3026.7		1068.4	2.0307	6146.2	310.5	1.00	120.59	0.1255		0.050646		0.010009	144.7028	18.08785
15 165 1867 1875 18		161	164	2877.2		1009.9	2.0442	5881.5	295.2	1.00	114.63	0.1255		0.048144	3.3068	0.009514	137,5554	17.19442
17.1 17.4 3058.1 0.3580.1 0.358		165	169	2957.1		1020.2	2.0306	6004.7	303.4	9 5	117.81	0.1255		0.049481	3.3068	0.0097/8	141.3/53	17.6/191
0.0 1.1 1.0 300.1 0.349 0.329 0.039 0.329 0.039 0.329 0.039		1/1	1/4	3056.1		1058.0	2.0492	6262.5	313.0	. F	121.00	0.1255		0.05125	3.3068	0.010100	146.1064	18 29821
1 1		171	177	3071.6		1072.0	2.0064	6162.9	315.1	1.00	122.37	0.1255		0.051397	3,3068	0.010157	146.8494	18.35618
10 14 300.0 0.351 0.134 0.101 10.5 0.105 3.6625 0.2502 0.3434 0.00929 183.741 17.1 11 160 160 160 160 160 115.6 0.125 3.66226 0.0359 183.741 17.1 12 150 160		171	176	3051.7		1068.1	2.0267	6185.0	313.1	1.00	121.58	0.1255		0.051064		0.010091	145.898	18.23725
11 160 170 290.29 0.3370 978.3 2.0196 586.2.8 297.8 100 115.65 0.1255 343.14 0.0458 3.3068 0.00599 138.7841 11.1 15 150 273.71 0.3300 993.2 2.0418 588.37 1.00 114.82 0.125 343.68 0.00598 13.0887 13.088 13.088 13.088 10.089 13.088 10.089 13.088 10.088 10.088 10.088 10.088 10.088 10.088 10.088 10.088 10.088 10.088 10.088 10.008 11.088 10.088 10.088 10.008 11.088 10.088 10.008 10.008 11.088 11.088 10.098 11.088 11.088 10.098 11.088 11.088 10.098 11.088 11.088 10.098 11.088 11.088 10.098 11.188 10.098 11.188 10.098 11.088 10.098 11.088 11.088 10.098 11.088 10.098 11.088 <td></td> <td>167</td> <td>174</td> <td>3001.0</td> <td></td> <td>1053.4</td> <td>2.0330</td> <td>6101.1</td> <td>307.9</td> <td>1.00</td> <td>119.56</td> <td>0.1255</td> <td></td> <td>0.050216</td> <td></td> <td>0.009924</td> <td>143.4741</td> <td>17.93426</td>		167	174	3001.0		1053.4	2.0330	6101.1	307.9	1.00	119.56	0.1255		0.050216		0.009924	143.4741	17.93426
15 16 2737.1 0.3300 903.2 2.0418 558.3 200 1050.5 43.5061 0.0458 3.3068 0.009051 130.8574 10. 13 16 188 2881.9 0.3380 974.1 2.030 2853.1 295.7 1.00 114.82 0.125 38.4579 0.03850 3.3068 0.00051 110.001 1.0 1.0 1.15 28.4579 0.03850 3.3068 0.00051 110.001 1.0 1.0 0.125 28.8375 0.03850 3.3068 0.00051 110.001 1.0 0.125 28.8375 0.03850 3.00050 110.001 1.0 0.125 28.8375 0.03850 3.3068 0.00761 110.001 1.0 0.125 28.8369 0.00761 110.001 1.0 0.125 28.8369 0.00761 110.001 0.125 28.8369 0.00849 13.008 0.00761 110.001 0.125 28.8369 0.00849 110.001 0.125 28.8369 0.00849 13.008		160	170	2902.9		978.3	2.0196	5862.8	297.8	1.00	115.65	0.1255		0.048574	3.3068	0.009599	138.7841	17.34801
13 161 168 28819 0.3380 974.1 2.0310 5853.1 295.7 1.00 114.82 0.1255 56.5785 0.048223 3.3068 0.00553 137.780.1 1.1 14 129 133 2301.4 0.3810 876.8 2.038 4621.1 236.1 1.00 9.125 288.8257 0.0353 3.3068 0.00533 137.780 1.1 15 108 1.22 2053.4 0.3750 868.3 2.0231 4659.3 2.025 1.00 9.16 0.1255 288.0391 0.03853 3.3068 0.00551 110.027 1.1 0.1255 288.0391 0.03853 1.1 0.00558 1.1 0.00558 1.1 0.00558 1.1 0.00558 1.1 0.00558 1.1 0.00558 1.1 0.00558 0.00559 1.1 0.00558 1.1 0.0155 289.0391 0.03598 0.00569 1.1 0.0155 289.0391 0.03598 0.00599 1.1 0.0155 <		155	160	2737.1		903.2	2.0418	5588.7	280.8	1.00	109.05	0.1255	•••	0.0458	3.3068	0.009051	130.8574	16.35717
14 129 133 230.14 0.3810 876.8 2036.1 10.0 91.69 0.1255 288.825.7 0.038509 3.3068 0.00761 110.0271 13.1 15 108 122 2058.7 0.3610 743.2 2.0179 4559.3 1.00 91.76 0.1255 288.355 0.03448 3.3068 0.00761 110.0271 13.1 15 126 126 246.08 0.3770 92.8 2.0375 1.00 91.76 0.1255 288.039 0.03448 3.3068 0.00761 110.0271 13.1 17 132 246.08 0.3770 92.8 2.038 257.5 1.00 91.75 0.4817 3.068 0.00959 18.433 1.0 1.0 91.75 0.4818 98.73 1.0 91.75 0.1255 286.35 1.0 91.75 0.1255 38.438 0.04818 98.433 11.0 91.75 0.1255 38.438 0.00959 1.0 91.75 0.1255		161		2881.9		974.1	2.0310	5853.1	295.7	1.00	114.82	0.1255		0.048223	3,3068	0.00953	137.7801	17.22251
15 108 122 2058.7 0.354.0 743.2 20179 4154.2 211.2 100 8.20 0.1255 28.3.669 0.034448 3.3068 0.006808 98.4239 11.0 15 126 132 2303.1 0.3770 868.3 2.0231 4659.3 236.3 1.00 91.76 0.1255 280.0391 0.038538 3.3068 0.009516 110.0084 13.3 17 132 146 246.08 0.3750 952.8 2.0387 297.7 1.00 91.76 0.1255 280.0391 0.03853 138.7381 17.048 17.04 0.1255 280.0391 0.03853 137.737 17.04 17.04 0.1255 280.0391 0.04177 17.04 17.04 0.1255 280.0391 13.04 17.04 0.1255 280.0391 13.048 17.04 17.04 0.1255 280.032 0.04173 17.048 17.04 17.05 0.1255 280.035 0.04917 17.049 17.048 280.12		129		2301.4		876.8	2.0388	4692.1	236.1	1.00	91.69	0.1255		0.038509	3.3068	0.00761	110.0271	13.75339
15 132 2393.1 0.3770 866.3 2.0231 4659.3 1.00 91.76 0.1255 283.0391 0.038538 3.3068 0.000/bit 110.0084 1.1 17 132 145 2460.8 0.03750 95.4 2.0387 52.5 1.00 98.04 0.1255 38.8304 0.04177 3.3068 0.00954 17.6478 1.0 11.6 0.1255 38.8304 0.04177 3.3068 0.00954 17.6478 1.0 11.6 0.1255 36.0123 0.04858 3.3068 0.00954 17.6478 1.0 11.432 0.1255 36.1233 0.04853 17.148 17.6 11.432 0.1255 36.1233 0.09853 17.7 1.0 11.432 0.1255 36.0123 3.3068 0.00954 17.187 17.6 17.6 11.432 0.1255 36.1213 0.04863 17.187 17.6 17.6 0.1255 35.1166 0.04863 137.187 17.6 17.6 0.1255 35.1166 0.04863		108		2058.7		743.2	2.0179	4154.2	211.2	1.8	82.02	0.1255		0.034448	3.3068	0.006808	98.4239	12.30299
14 145 144 145 144 145 144 145 144 145 144 145 144		126		2303.1		868.3	2.0231	4659.3	236.3	1.00	91.76	0.1255		0.038538	3.3068	0.007616	110.1084	13.76355
18 162 189 290.4 2.0448 293.58 297.7 1.00 113.01 0.1253 364.1363 1.046323 1.306 0.02939 1.307.3 1.00 113.01 0.1253 364.123 0.04801 3.306 0.00933 137.1873 1.7 19 160 166 2869.5 0.3460 992.8 2.0441 1.00 114.43 0.1255 351.161 0.04801 3.306 0.00933 137.187 1.7 1 144 154 2657.3 0.3450 993.4 2.0346 5716.9 1.00 111.48 0.1255 351.161 0.04601 13.7787 1.7 1 144 154 2657.3 0.3620 929.4 2.038 5234.5 263.4 1.00 10.25 351.161 0.04823 13.7787 11.5 2 1.04 1.05 198.1 1.04 1.05 7.29 0.1255 224.976 0.03063 3.3068 0.00695 11.26 3 </td <td></td> <td>132</td> <td>145</td> <td>2450.8</td> <td></td> <td>8.776</td> <td>7.0387</td> <td>5016.8</td> <td>5.252</td> <td>T.00</td> <td>98.04 10.04</td> <td>0.1255</td> <td></td> <td>0.0411//</td> <td>3.3068</td> <td>0.008137</td> <td>130 7363</td> <td>05C0/.4T</td>		132	145	2450.8		8.776	7.0387	5016.8	5.252	T.00	98.04 10.04	0.1255		0.0411//	3.3068	0.008137	130 7363	05C0/.4T
15 160 126. 127. 127. 127. 127. 127. 12		197	169	230T.9		4,480	2.0448	5933.8	7.70	1.00	117.01	0.1255		0.046336	3,2069	0.000000	137 1873	17 14841
21 144 154 265.7 335.0 930.3 238.6 535.7 70.4 100 105.00 0.1255 330.7553 0.0441 330.8 0.08715 126 22 140 151 2567.3 0.3520 930.3 238.6 535.7 70.4 1.00 102.28 0.1255 322.1962 0.042959 3.3068 0.00848 127.7394 1.5 23 106 1928.1 0.3700 713.4 2.0126 388.4 1.00 72.93 0.1255 224.776 0.03063 3.3068 0.006376 92.18008 1.1 00 98 104 1830.5 0.3490 629.8 2.0205 3646.0 185.1 1.00 7.289 0.1255 226.4468 0.03013 3.3068 0.00597 86.27092 1.0 01 98 101 1804.5 0.246.0 185.1 1.00 7.289 0.1255 224.648 0.03013 3.3068 0.00597 86.27092 1.0		155	165	2,505,5		987.7	2.0431	5716.9	287.1	8 7	111.48	0.1255	,	0.046821	3.3068	0.009253	133.7737	16.72171
2. 4.0 15.1 256.7.3 0.3620 9.94 2.0389 5234.5 263.4 1.00 102.28 0.1255 32.1962 0.042959 3.3068 0.008489 122.7394 23 1.06 1.09 1.51 2.567.3 0.3620 9.94 2.0126 3.880.4 1.00 76.82 0.1255 241.976 0.02263 3.3068 0.006376 92.18008 00 98 1.04 1830.5 0.3490 648.0 2.0129 3684.6 185.1 1.00 72.93 0.1255 224.1976 0.03063 3.3068 0.006938 97.1394 1.00 72.93 0.1255 224.1976 0.03063 3.3068 0.006938 87.51394 1.00 72.93 0.1255 224.1976 0.03063 87.51394 1.00 72.93 0.1255 224.1976 0.03063 87.51394 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00		144	154	2635.5		930.3	2.0306	5351.7	270.4	1.00	105.00	0.1255	•••	0.0441	3.3068	0.008715	126	15.75
13 106 109 1938.1 0.3700 713.4 2.0126 3880.4 197.8 1.00 76.82 0.125 24.9766 0.03263 3.3068 0.006337 92.138008 00 98 104 1830.5 0.3490 629.8 2.0205 3646.0 185.1 1.00 71.89 0.1255 224.7278 0.03063 3.3068 0.005967 87.1339 1.00 71.89 0.1255 226.4648 0.030195 3.3068 0.005967 86.27092 1.00 7.189 0.1255 226.4648 0.030195 3.3068 0.005967 86.27092 1.00 1.00 7.189 0.1255 226.4648 0.03019 3.3068 0.005967 86.27092 1.00 1.00 7.189 0.1255 226.4648 0.03011 3.3068 0.005967 86.27092 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	015 22	140		2567.3		929.4	2.0389	5234.5	263.4	1.0	102.28	0.1255		0.042959	3.3068	0.008489	122.7394	15.34243
00 98 104 1830,5 0,3540 648.0 2.0129 3684,6 187.8 1.00 72.93 0.1255 229,7278 0.03063 3.3068 0.006053 87,51394 3 01 98 101 1804,5 0,3490 629.8 2.0205 346.0 185.1 1.00 71.89 0.1255 226,4648 0.030195 3.3068 0.005967 86.27092 3 02 99 106 1865,8 0,3400 614.0 2.0043 3619.3 185.3 1.00 71.94 0.1255 226,6279 0.030217 3.3068 0.00597 86.33307 3 03 99 120,8 0,3400 616,9 2.0066 3640,5 186.1 1.00 72.28 0.1255 227,6947 0.030359 3.3068 0.005999 86.73944 3	015 23	106		1928.1		713.4	2.0126	3880.4	197.8	1.00	76.82	0.1255		0.032263	3,3068	0.006376	92.18008	11.52251
01 98 101 1804,5 0.3490 629.8 2.0205 3646.0 185.1 1.00 71.89 0.1255 226,4648 0.030195 3.3068 0.005967 86.27092 3		86	104	1830.5		648.0	2.0129	3684.6	187.8	1.00	72.93	0.1255		0.03063	3.3068	0.006053	87.51394	10.93924
02 99 106 1865.3 0,3410 636.1 2,0056 3741.1 191,4 1,00 74,31 0,1255 234,0952 0,031212 3,3068 0,0005168 89,17769 1 03 99 99 1805.8 0,3400 614,0 2,0043 3619.3 185,3 1,00 71,94 0,1255 226,6279 0,030217 3,3068 0,005971 86,33307 1 04 100 100 1814.3 0,3400 616.9 2,0066 3640.5 186.1 1,00 72,28 0,1255 227,6947 0,030359 3,3068 0,005999 86,73944 7		86		1804.5		629.8	2.0205	3646.0	185.1	1.00	71.89	0.1255		0.030195	3.3068	0.005967	86.27092	10.78386
03 99 99 1805.8 0.3400 614.0 2.0043 3619.3 1.00 71.94 0.1255 226.6279 0.030217 3.3068 0.005971 86.33307 1 04 100 100 1814.3 0.3400 616.9 2.0066 3640.5 186.1 1.00 72.28 0.1255 227.6947 0.030359 3.3068 0.005999 86.73944 7		66		1865.3		636.1	2.0056	3741.1	191.4	1.00	74.31	0.1255	• •	0.031212	3.3068	0.006168	89.17769	11.14721
04 100 100 1814.3 0.3400 616.9 2.0066 3640.5 186.1 1.00 72.28 0.1255 227.6947 0.030359 3.3068 0.005999 86.73944 3		66	66	1805.8		614.0	2.0043	3619.3	185.3	1.00	71.94	0.1255	• •	0.030217	3.3068	0.005971	86.33307	10.79163
		100	100	1814.3		616.9	2.0066	3640.5	186.1	1.00	72.28	0.1255	•	0.030359	3.3068	0.005999	86.73944	10.84243

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

	Oate/Hour Loa	YT01 Gross Y Load MW Value	YT02 Gross C Load MW Value	Common Stack C Heat Input (mmBtu)	Common Stack C	Common Stack Common Stack Common Stack NOx LbmmBtu NOx LbMr (LbmmBtu)	ommon Stack C SO2 (Lb/mmBtu)	ommon Stack C SO2 (Lb/Hr)	Common Stack Common Stack Unit Operation SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)		Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr) (lb/TBtu)		Mercury (Ib/hr)	HCI (lb/hr)	HF (lb/hr)
	2-07-2015 05	106	113	1976.1	0.3220	636.3	2.0123	3976.5	202.7	1.00	78.73	0.1255	248.0006	0.033066	_	0.006535	94.4749	11.80936
0.0 110 120 <td></td> <td>102</td> <td>109</td> <td>1912.3</td> <td>0.3430</td> <td>622.9</td> <td>2.0106</td> <td>3844.8</td> <td>196.2</td> <td>1.00</td> <td>76.19</td> <td>0.1255</td> <td>239.9937</td> <td>0.031999</td> <td>_</td> <td></td> <td>91.4247</td> <td>11.42809</td>		102	109	1912.3	0.3430	622.9	2.0106	3844.8	196.2	1.00	76.19	0.1255	239.9937	0.031999	_		91.4247	11.42809
0.0 11.0		110	120	2073.5	0.3350	694.6	2.0078	4163.1	212.7	1.00	82.61	0.1255	260.2243	0.034696	_		99.13147	12.39143
0. 10. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		125	138	2362.8	0.3430	810.4	2.0171	4765.9	242.4	1.00	94.14	0.1255	296.5314	0.039537				14.12032
11 12<		748		5.0252	0.5450	4.000.0	2.0173	5358.4	270.4	1.00	105.00	0.1255	330,7678	0.044102	_			15.7506
		102	126	2072.0	0.4050	839.2	1.9950	4133.7	212.6	1.00	82.55	0.1255	260.036	0.034671	_		99.05976	12.38247
		56	114	1920.7	0.3880	745.2	1.9860	3814.6	197.1	1.00	76.52	0.1255	241.0479	0.032139	_	٠.	91.82629	11.47829
		93	101	1808.8	0.4050	732.6	1.9794	3580.4	185.6	1.00	72.06	0.1255	227.0044	0.030267	_		86.47649	10.80956
11 34 10 1122 20,430 76.56 192.57 12.57 11.0 71.0 0.1255 23.74.44 0.0430 78.52 10.0 71.0 0.1255 23.74.44 0.0430 78.52 10.0 11.0 71.0 0.1255 23.74.44 0.0430 78.52 10.0 11.0 0.1255 23.74.44 0.0430 78.52 10.0 71.0 0.1255 23.24.44 0.0430 0.0430 78.52 10.0 77.4 0.1255 23.24.64 0.00295 23.24.44 10.0 77.3 0.1255 23.24.64 0.00295 23.24.44 10.0 77.34 0.1255 23.24.64 0.00295 23.24.44 10.0 77.34 0.1255 23.24.64 10.0 77.34 0.1255 0.00295 23.24.64 10.0 77.34 0.00295 23.046 0.00295 23.24.64 10.0 77.34 0.00295 23.046 0.00295 23.046 0.00295 23.046 0.00295 23.046 0.00295 23.046 0.00295 <td></td> <td>93</td> <td>102</td> <td>1802.8</td> <td>0.4060</td> <td>731.9</td> <td>1.9809</td> <td>3571.1</td> <td>185.0</td> <td>1.00</td> <td>71.82</td> <td>0.1255</td> <td>226.2514</td> <td>0.030166</td> <td>_</td> <td></td> <td>85.18964</td> <td>10.77371</td>		93	102	1802.8	0.4060	731.9	1.9809	3571.1	185.0	1.00	71.82	0.1255	226.2514	0.030166	_		85.18964	10.77371
11 33 110 1794.6 0.4360 78.2 2005 35.4 13.6 13.9 10.0 71.0		75	101	1782.8	0.4300	9'99'	1.9928	3552.7	182.9	1.00	71.03	0.1255	223.7414	0.029832	_	0.005895	85.23347	10.65418
11 11<		93	106	1811.7	0.4380	793.5	2.0006	3624.4	185.9	1.00	72.18	0.1255	227.3684	0.030315	_	0.005991	86.61514	10.82689
11 11<		93	101	1784.6	0.4360	778.1	1.9895	3550,4	183.1	1.00	71.10	0.1255	223.9673	0.029862		0.005901	85.31952	10.66494
11 11 12 13 13 14 12 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14 15 14 14 15 14 14 15 14 14 15 14 14 15 14 14 15 14 14 10 724 0.125 22.8540 0.030078 3.00 0.00078 3.00 0.00079 3.00 0.000		115	129	2204.1	0.4050	892.7	1.9975	4402.6	226.1	1.00	87.81	0.1255	276.6146	0.036881			105.3733	13.1/191
2 8 101 1820.0 0.3890 0.3890 1868 1.00 7.354 0.11285 231.0581 0.000008 3.4000 0.0000008 3.4000 0.0000008		110	102	1933.1	0.4330	837.0	1.9927	3852.0	198.3	1.00	77.02	0.1255	242.6041	0.032347	_		92.41912	11.55239
11 18 10 1841.1 0.3420 0.783 1862.2 188.2 0.188.2 0.188.2 0.3420 0.000 188.2 0.188.2 0.3420 0.000 188.2 0.188.2 0.000 188.2 0.188.2 0.000 0.000 188.2 0.000 0.000 188.2 0.000 0.000 0.000 0.000 0.000 0.000 0.000		86	101	1820.8	0.3890	708.3	1.9937	3630.1	186.8	1.00	72.54	0.1255	228.5104	0.030468	-	0.006021	87.0502	10.8812/
23 88 100 1897.3 3684.3 1894.4 100 74.5 12.58.69 (1.050.78) 3.300.0 1898.7 1899.3 3884.1 18.4 100 74.5 12.58.69 (1.050.78) 3.300.0 100.000.0 3.200.0 100.000.0 <th< td=""><td></td><td>86</td><td>105</td><td>1841.1</td><td>0.3820</td><td>703.3</td><td>2.0033</td><td>3688.2</td><td>188.9</td><td>1.00</td><td>73.35</td><td>0.1255</td><td>231.0581</td><td>0.030807</td><td>_</td><td>0.006088</td><td>88.02072</td><td>11.00259</td></th<>		86	105	1841.1	0.3820	703.3	2.0033	3688.2	188.9	1.00	73.35	0.1255	231.0581	0.030807	_	0.006088	88.02072	11.00259
23 88 100 1875 100 72.53 12.52 22.49.90 10030073 3.000022 3.500002 20.00002 2		86	100	1797.5	0.3720	668.7	1.9939	3584.1	184.4	1.00	71.61	0.1255	572.5863	0.030078		0.005944	85.93525	10./42US
00 38 100 1871 0.3400 619.2 1.554 1.00 7.255 2.125-2		86	100	1808.0	0.3450	623.8	1.9947	3606.5	185.5	1.00	72.03	0.1255	226.904	0.030253		0.005979	86.43825	10.804/8
01 1772 1		88	9	1821.1	0.3400	619.2	1.9955	3634.0	186.8	1.00	72.55	0.1255	228.5481	0.030473	_	0.005022	87.05454	10.883U/
0.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 18.9 1.0 1.0 1.2 2.2.4.15.8 0.00398 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 3.30.8 0.00399 8.33.90.7 0.00399 8.33.90.7 0.00399 8.33.90.7 0.00399 8.33.90.7 0.00399 8.33.90.7 0.00399 8.33.90.8 0.00399 8.33.90.8 0.00399 8.33.90.8 0.00399 8.33.90.8 0.00399 8.33.90.8 0.00399	2-08-2015 01	26	100	1787.3	0.3530	630.9	1.9989	3572.7	183.4	1.00	71.21	0.1255	224.3062	0.029907	-	1,000,00	85.44861	10.58108
98 99 1796.1 0.3550 64.25.1 1806.1 255.7 1824.1 100 71.51 0.1255 222.24.7 0.000393 85.897.1 98 99 1794.6 0.3580 642.5 1896.3 3554.7 183.1 100 71.51 0.1255 223.24.7 0.000393 85.897.1 99 1794.6 0.3570 647.1 1991.8 3554.4 183.4 100 71.21 0.1255 223.24.7 0.00039 85.897.1 99 100 1790.2 0.3400 644.5 1.991.9 356.4 100 71.31 0.1255 223.24.0 0.00390 3.308 0.00590 58.807.1 99 100 1790.2 0.3400 644.5 1.980.4 357.4 182.4 100 71.25 223.9 0.0299.7 3.308 0.0099.8 3.308 0.0099.8 3.308 0.0099.8 3.308 0.0099.8 3.308 0.0099.8 3.308 0.0099.8 3.308 0.0099.8 3.308		86	100	1824.0	0.3480	634.8	1.9862	3622.8	187.1	90,	72.67	0.1255	228.912	0.030521	_	0.005032	VC:05.18	10.5004
04 98 99 1744.8 0.3580 647.5 1,890.1 353.5 44.1 1,1995 33.2 1,100 71.1 0.1255 23.54.7 0.1259 23.24.7 0.1259 23.24.7 0.1259 23.24.7 0.1259 23.24.7 0.000000 68.3192. 0.000000 68.3192. 0.000000 68.3192. 0.000000 68.3192. 0.000000 68.3192. 0.0000000 0.000000 0.000000 0.000000 0.000000 0.0	2-08-2015 03	86	6	1786.1	0.3550	634.1	1.9863	3547.7	183.2	97.	71.16	0.1255	224.1556	0.029887		0.00500	#7TEC.C9	10.0729
06 99 1788.6 0.357.0 64.71 1.999 17.24 0.125 2.25.99 0.0299.1 2.35.0 0.0059.1 85.420.0 06 99 1788.6 0.357.0 64.45 1.999 356.2 183.7 1.00 71.3 0.125 2.43.90 0.00591 85.420.0 09 99 1.00 1780.0 0.350.0 64.45 1.9894 356.2 183.7 1.00 71.3 0.125 2.43.90 0.00591 85.420.0 09 99 1.00 1786.4 0.3470 65.8 1.9844 356.2 1.00 71.3 0.125 2.453.9 0.00591 35.06 0.00591 85.4207 11 98 1.00 1.02 0.125 2.4587 0.00591 35.2 0.00591 3.006 0.00591 3.006 0.00591 3.006 0.00591 3.006 0.00591 3.006 0.00591 3.006 0.00591 3.006 0.00591 3.006 0.00591 3.006		88	66 3	1794.8	0.3580	642.5	1.9801	3553.8	184.1	9.5	7.51	0.1255	225.24/4	0.030033			65.6U/1/ 95.31052	10.65464
0.0 1.78 1.00 1.78 1.00 1.78 0.025 25.520 0.025 25.520 0.0 1.78 1.00 1.78 0.025 28.52 1.00 1.72 2.025 2.48 2.00 2.52 2.48 2.00 2.52 2.48 2.00 2.52 2.48 2.00 2.52 2.48 2.00 2.52 2.48 2.00 2.52 2.48 2.00 2.52 2.48 2.00 2.52 2.48 2.00 2.52 2.48 2.00 2.52 2.22		86	g ;	1784.6	0.35/0	63/.1	1.9/95	3532.6	185.1	T:00	77.10	0.1255	C/05.C77	0.025002	_		200707	10,0000
0.0 1.0 <td>12-08-2015 06</td> <td>97</td> <td>100</td> <td>1788.0</td> <td>0.3620</td> <td>647.3</td> <td>1.9918</td> <td>3561.4</td> <td>183.4</td> <td>8 5</td> <td>71.24</td> <td>0.1255</td> <td>774.594</td> <td>V.02919</td> <td>_</td> <td>518500.0</td> <td>70797.00</td> <td>10.60520</td>	12-08-2015 06	97	100	1788.0	0.3620	647.3	1.9918	3561.4	183.4	8 5	71.24	0.1255	774.594	V.02919	_	518500.0	70797.00	10.60520
0 1780.0 1780.0 1283.0 6.283.1 1991.0 3545.6 182.6 1.00 7.03.7 2.25.3 1.00 7.03.0 2.03.0 2.03.0 2.03.0 1.03.0 7.03.0 1.03.0 2.03.0 1.03.0		86	100	1790.3	0.3600	644.5	1.9899	2562.5	183.7	1.00	/1.33	0.1255	7790.477	0.029937		25500.0	2025020	10,002
98 100 188.44 0.3470 6.65.84 357.4 1.00 7.137 0.1255 228.9873 0.030534 37.23.18 0.000534 87.23.18 1.00 1.00 7.137 0.1255 228.9873 0.030534 87.23.18 1.00		76	9 5	1780.0	0.3530	628.3	1.9919	3545.6	182.6	9.5	70.92	0.1255	ř	5876700		0.005886	35.0336	10.65/45
10 98 101 1824,6 0.3470 64.3 1.928,4 36.25.2 10.0 7.259 1.0.259 2.0.259,2 0.005066 3.3068 0.00504 8.33227 11 98 100 1826,7 0.350 64.12 1.9867 368.9 100 7.259 0.005066 3.3068 0.005094 8.33227 12 98 100 1789,4 0.3510 623.1 1.9843 3550.7 183.4 100 7.129 0.1255 224.369 0.00506 3.3068 0.00591 85.3227 18.4 100 7.129 0.1255 224.369 0.00596 3.3068 0.00591 85.3227 18.4 100 7.129 0.1255 224.345 0.00596 3.3068 0.00590 85.253 85.553 18.4 100 7.129 0.1255 224.345 0.00599 85.529 85.529 85.529 18.5 100 7.129 0.1255 224.345 0.00599 85.539.24 85.539.24 85.539.24 85.53	2-08-2015 09	86	90	1806.4	0.3470	626.8	1.9804	35/7.4	185.3	1.00	72.00	0.1255	•	0.00027		6/6600.0	70100.00	10 00300
11 98 104 188.5 0.3490 641.2 1.952.0 187.4 1.00 7.7.8 0.1253 2.25.4984 0.030066 3.3068 0.03924 85.0079 13 98 100 1796.8 0.3490 623.1 1.9847 3550.7 184.4 1.00 71.29 0.1255 225.4984 0.030066 3.3068 0.00994 85.507.9 14 97 100 1796.8 0.3480 623.2 1.9843 3550.7 183.6 1.00 71.25 224.4984 0.03066 3.3068 0.00994 85.507.9 16 97 100 1792.6 0.3480 623.2 1.8843 3.54.5 1.00 71.47 0.1255 224.745 0.03966 8.3008 0.00994 85.50799 16 97 100 1792.6 0.3490 623.6 1.8843 3.54.7 184.1 1.00 71.4 0.1255 224.745 0.03966 8.3008 0.00991 85.5404 18	2-08-2015 10	88	101	1824.6	0.3470	633.1	1.9854	3622.5	187.2	9.5	72.69	0.1255	6/86.877	0.030531	_	0.005034	781.62.78	10.90598
12 98 100 1796.8 0.3440 627.1 1.986.7 356.9.7 1384.4 100 74.29 0.1255 24.4589 0.029042 33.068 0.059242 85.449 13 98 100 1796.8 0.3480 623.1 1.9843 355.0 183.6 100 71.25 224.589 0.02966 3.3068 0.05924 85.494 14 97 100 1796.8 0.3480 623.2 1.9843 355.2 14.1 1.025 224.559 0.02966 3.3068 0.05924 85.494 15 97 100 1792.6 0.3480 623.7 1.9843 355.2 14.1 1.00 71.47 0.125 224.756 0.02996 85.391.4 17 97 100 1792.6 0.3490 625.6 19840 356.7 18.4 1.00 71.4 0.125 224.759 0.02996 85.391.4 18 97 100 1792.6 0.3294 356.7		88	104	1826.7	0.3510	641.2	1.9920	3638.8	18/.4	20.7	8/.7/	0.1255		0.030566		0.00004	77700 30	10.91031
13 98 100 17884 0.3510 6.28.1 1.9843 3550.7 188.6 1.00 7.1.5 0.1.25 2.4.745 0.02966 3.3088 0.00592 8.5.1594 14 97 100 1796.8 0.3480 623.5 1.9843 355.6 183.7 1.00 7.1.4 0.125 2.4.156 0.02966 3.3088 0.005902 85.51394 16 97 100 1792.6 0.3490 623.6 1.9840 355.6 184.1 1.00 7.1.4 0.125 2.4.154 0.02966 3.3068 0.005902 85.5613 17 97 100 1792.6 0.3490 625.6 1.9870 356.5 184.1 1.00 7.1.4 0.125 2.4.971 0.02996 3.3068 0.00592 85.5610 9.0 1.00 7.1.4 0.125 2.4.971 0.02996 3.3068 0.00592 85.6113 9.0 1.00 7.1.4 0.125 2.2.4.971 0.00596 3.3068 0.0059	12-08-2015 12	86	100	1796.8	0.3490	627.1	1.9867	3569.7	184.4	9.5	77.59	0.1255		0.050066		0.005942	62.302.79	10,6953
14 97 100 1790.8 6.34.2 1.98.4 354.9 183.7 1.00 7.15 2.44.4 3.24.4 354.9 183.7 1.00 7.15 2.44.4 3.008.0 0.00390	12-08-2015 13	86	100	1789.4	0.3510	628.1	1.9843	3550.7	185.5	9.5	£2.1/	0.1255		246670.0		0.003017	95 61504	10.09303
15 97 100 1785.1 0.5480 6.415 1.5844 3534.3 126.3 7.115 2.12.5 2.24.135 2.24.135 2.02.259 2.02.	12-08-2015 14	76	90	1790.8	0.3480	623.2	1.9823	0.040.0	183./	9 6	7.15	0.1235		799970		0.003322	85 30124	10.6739
16 97 100 1795.9 0.535.0 629.7 12804 3552.0 100 714.2 2.515.9 <th< td=""><td>2-08-2015 15</td><td>76</td><td>9 5</td><td>1/85.1</td><td>0.5480</td><td>621.b</td><td>1.9844</td><td>2400</td><td>105.0</td><td>8 8</td><td>71.10</td><td>0.1755</td><td></td><td>0.025047</td><td>_</td><td>0.00100</td><td>25.00.00</td><td>10.72052</td></th<>	2-08-2015 15	76	9 5	1/85.1	0.5480	621.b	1.9844	2400	105.0	8 8	71.10	0.1755		0.025047	_	0.00100	25.00.00	10.72052
97 100 1792.8 0.3490 625.0 1790.0 171.48 0.1255 225.1721 0.03002 3.006 0.005924 85.6494 10 97 100 1794.2 0.3490 625.0 1.3850 356.7 184.1 1.00 71.74 0.1255 225.172 0.03097 3.3068 0.005924 85.6494 10 98 101 1801.8 0.3490 628.8 1.9920 3589.2 184.9 1.00 71.78 0.1255 226.1259 0.03015 3.3068 0.005924 85.6494 10 98 101 1801.8 0.3460 629.7 1.9883 3618.7 1.00 71.78 0.1255 226.125 0.03015 3.3068 0.005926 85.6827 10 98 100 1792.2 0.3490 626.5 1.9817 3557.6 184.2 1.00 71.52 228.41 0.03049 3.3068 0.005936 85.63287 10 9 1791.0 0.3450	02-08-2015 16	66.0	9 5	1/93.9	0.3510	7.629.7	1.9804	3352.0	183.0	3 5	71.47	0.1255		0.029996		0.005928	85,70199	10.71275
97 100 1794.2 0.3490 0.66.2 1.9770 3347.2 134.4 1.00 71.37 0.1253 22.13.17.1 0.0002.2 23.97.0 0.000.2		6	700	1,32.0	0010	0,500	1000	1000	1001	9 6	1 0 1	1100		0.00000		0.005033	97 77849	10 72231
97 100 1731.3 100 1731.3 120.5 120.		, E	9 5	1/94.2	0.5490	2.020	1 0952	2546.2	183.2	3 5	71 37	0.1255		0.029977	_	0.005924	85.6494	10.70618
98 101 1801.8 0.3450 0.283. 1.997.0 3.283. 1.00 7.1.7 0.125. 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2.2 2.02.2 2.02.2.2	ST ST02-80-70	'n	007	1/91.3	0.3300	027.0	0000	0000	0.001	80	71.70	0.1255		0.03015		0.005958	86 14183	10.76773
21 38 103 124.00 0.3460 0.25.7 1.36.3 356.7 100 71.5 1.25 22.4 10 71.5 1.25 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.5 0.125 22.4 1.0 71.3 0.125 22.4 1.0 71.3 0.125 22.4 1.0 71.3 0.125 22.4 1.0 71.3 0.125 22.4 1.0 71.3 0.125 22.4 1.0 71.3 0.125 22.4 <t< td=""><td>32-08-2015 20 32-08-2015 20</td><td>S 6</td><td>101</td><td>1801.8</td><td>0.3490</td><td>0.020</td><td>1.9320</td><td>20000</td><td>104.3</td><td>8 5</td><td>77.51</td><td>0.1255</td><td>-</td><td>0.030454</td><td>_</td><td>0.006018</td><td>87.01195</td><td>10.87649</td></t<>	32-08-2015 20 32-08-2015 20	S 6	101	1801.8	0.3490	0.020	1.9320	20000	104.3	8 5	77.51	0.1255	-	0.030454	_	0.006018	87.01195	10.87649
23 98 100 1795.2 0.3490 626.5 1.9817 3557.6 184.2 1.00 71.52 0.1255 225.276 0.030393 3.3068 0.005936 85.82629 1.0 00 97 99 1791.0 0.3490 625.1 1.9867 3558.4 183.8 1.00 71.35 0.1255 224.7705 0.029969 3.3068 0.005922 85.82659 10 01 98 100 1791.1 0.3460 619.7 1.9867 3558.4 183.8 1.00 71.67 0.1255 224.7781 0.029971 3.3068 0.005949 86.00797 02 98 100 1799.0 0.3420 615.3 1.9930 3585.4 184.5 1.00 71.58 0.1255 225.7745 0.030003 3.3068 0.005949 86.00797 03 97 100 1796.6 0.3450 619.8 1.9930 3580.6 184.3 1.00 71.58 0.1255 225.7775 0.030063 </td <td></td> <td>8 6</td> <td>9 5</td> <td>1402.0</td> <td>0.5460</td> <td>7.673</td> <td>1.0003</td> <td>2567.0</td> <td>183.0</td> <td>8 6</td> <td>71.40</td> <td>0.1255</td> <td>2</td> <td>0.029989</td> <td></td> <td>0.005926</td> <td>85.68287</td> <td>10.71036</td>		8 6	9 5	1402.0	0.5460	7.673	1.0003	2567.0	183.0	8 6	71.40	0.1255	2	0.029989		0.005926	85.68287	10.71036
23 56 100 179.10 0.3490 625.1 1.3857 3556.4 183.8 1.00 71.35 0.1255 224.7705 0.029969 3.3068 0.005922 85.6355 1.00 01 97 99 1791.0 0.3460 619.7 1.3867 3558.4 183.8 1.00 71.36 0.1255 224.7781 0.029971 3.3068 0.005923 85.63028 1.00 02 98 100 1799.0 0.3420 615.3 1.9930 3585.4 184.5 1.00 71.57 225.7745 0.030103 3.3068 0.005949 86.00797 03 97 100 1796.6 0.3450 619.8 1.9930 3580.6 184.3 1.00 71.58 0.1155 225.7775 0.030063 3.3068 0.005941 85.89323 1	22-08-2015 22	8 8	3 5	1705.2	0.3480	625.7	1.9907	3,722	184.2	9	71.52	0.1255		0.030039	3,3068	0.005936	85.82629	10,72829
00 57 59 1791.0 0.3460 619.7 1.3867 3558.4 183.8 1.00 71.36 0.1255 224.7831 0.029971 3.3068 0.005923 85.63028 100 1791.0 0.3460 619.8 1.9890 3558.4 184.6 1.00 71.67 0.1255 225.7745 0.030103 3.3068 0.005949 86.00797 0.3408 0.005941 85.89323 10 1796.6 0.3450 619.8 1.9930 3580.6 184.3 1.00 71.58 0.1255 225.4733 0.030063 3.3068 0.005941 85.89323 10	25-08-2015 23	, r	<u>a</u> 8	1/93.2	0.3490	020.3	1.3001	3556	182 0	5 5	71 35	0.1255		0.02959	3.3068	0.005922	85.6255	10,70319
01 58 100 1/9.11 0.3460 619.8 1.9930 3580.6 184.3 1.00 71.58 0.1255 225.7745 0.030063 3.3068 0.005941 85.89323 10		ý 6	y 5	1/91.0	0.3490	1.620	1.3037	#:00000 #:00000	102.0	8 5	71 36	0.1255		0.029971	3 3068	0.005923	85 63028	10.70378
02 58 100 1/95.0 0.3450 619.8 1.9930 3580.6 184.3 1.00 71.58 0.1255 225.4733 0.030063 3.3068 0.005941 85.89323 10		o c	3 5	1.787.1	0.3460	6153	1 9990	10000	187.6	8 6	71 67	0.1255		0.030103	3.3068	0.005949	86.00797	10.751
U3 97 100 1/96.b 0.3450 615.8 1.3950 5360.0 164.3 1.00 7.11.0 61.17.0 61.27.0 61.00	22-09-2015 02	20 10	9 5	1/99.0	0.3420	615.3	1.9930	4.000.4	104.0	9 5	/T.0/	0.1253	٠.	0.000103	3 3068	0.005941	85.89373	10.73665
	12-09-2015 03	97	100	1796.6	0.3450	619.8	1.9930	3580.6	184.3	T'OO	77.38	O.1233	`	0.000000	0.000	4+60000	77.00.00	200

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

HF (lb/hr)	-	10.72948	0.75279	12.45598	13.39721	17.00124	14.65936	4.64084	13.86873	12.38725	12.00896	1.93606	11.48546	12.70996	13.5496	14.22669	5.48108	16.10618	12.46076	11.29781	11.05697	11.30558	11.02351	11.5739	11.22789	.2.45359	16.41096	18.39024	17.47052	6.32012	18.05319	8.11295	15.60956	14.98088	040001	1.U3425	11.12869	13,4721	17.11434	16.8/291	4/+0./1	15.327.23	11 00775	LL.US/43	20077.11	11.27092	
	-							•				' ' '		101.6797		• •	-	٠.			•	• •	-		•	_	•	•		-	-				10.34/41	• •	- •	٠,		134.9833 1		130.6183 1		• •			
HCI (lb/hr)	· ·				3 107.1777		, ,							٠.	٠.	.,			٠.			•			~	٠.			-		•	., ,	_	•	••	_			•		- '			٥			
Mercury (lb/hr)	1	0.005937	0.00595	0.006892	0.007413	0.000,0	0.0081/2	0.008101	0.007674	0.005854	0.006645	0.006605	0.006355	0.007033	0.007497	0.007872	0.008566	0.008912	0.006895	0.006251	0.006118	0.006256	0.0061	0.006404	0.006213	0.006891	0.009081	0.010176	0.009667		_	_	_	- '	-			_		_			1/00/00/0		_	_	
Mercury (tb/T8tu)	•	3.3068	3.3068	3.3068	3.3068	3.3058	3.3068	3 3058	3 3068	3.3068	3,3068	3.3068	3.3068	3,3068	3.3068	3,3068	3.3068	3,3068	3,3068	3.3068	3,3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3068	3.3058	\$3068	5.3058	5.5068	3.5068	3,3068	3.3058	3.3068	3.3068	3.3058	0.0000	3,3068	
PM-10 Lead (lb/hr)	-	0.030043	0.030108	0.034877	0.037512	0.038355	0.041385	0.04094	0.040334	0.034684	0.034664	0.033421	0.032159	0.035588	0.037939	0.039835	0.043347	0.045097	0.03489	0.031634	0.03096	0.031656	0.030866	0.032407	0.031438	0.03487	0.045951	0.051493	0.048917	0.045696	0.050549	0.050716	0.043707	0.041946	0.033582	0.030896	0.03116	0.037723	0.04/92	0.047244	0.047/33	0.045/16	0.033/5/	0.031045	1000000	0.031559	,
PM-10 (Lb/Hr)	-	225.3227	225.8122	261.5797	281.3459	287.5205	310.3992	307.4625	PZ75, 196	251.247	200.1504	250.6612	241.1985	266.9134	284.5462	298.7653	325.1078	338,2351	261.6801	237.2578	232.2001	237.4209	231.4973	243.0559	235.7894	261.5295	344.6356	386.2012	366.8867	342.728	379.123	380.378	327.806	314.6034	251.856	231.7232	233.7061	282.9272	359.4069	354.3367	358.0013	342.8786	255.1837	232.8402	#TC:677	236,693	
PM-10 (15/mmBtu)	-	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	2527.0	0.1255	0.1233	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255)
Coal tons/hr		71.53	71.69	83.04	89.31	91.27	98.54	07.75	10.75	97.40	87.38	79.57	76.57	84.73	90,33	94.84	103.21	107.37	83.07	75.32	73.71	75.37	73.49	77.16	74.85	83.02	109.41	122.60	116.47	108.80	120.35	120.75	104.06	99.87	79.96	73.56	74.19	89.87	114.10	112.49	113.65	108.85	80.37 20.05	73.92	75.27	75.14	!
	-	1.00	1.00	1.00	1.00	1.00	90.1	9 6	8 6	3 5	9 6	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	7.00	9 6	ì
Common Stack Common Stack Common Stack Unit Operation SG2 (SQ2 (LbHr) CO2 (TonstHr) (minutes)		184.2	184.6	213.9	230.0	235.1	253.8	751.	730 1	1.862	/.212 5 305	204.9	197.2	218.2	232.6	244.2	265.8	276.5	213.9	194.0	189.8	194.1	189.3	198.7	192.8	213.8	281.7	315.7	299.9	280.2	309.9	311.0	268.0	257.2	205.9	189.4	191.1	231.3	293.8	289.7	292.7	280.3	207.0	190.3	187.6	201.6 193.5	1
ommon Stack C	 	3584.2	3550.7	4161.4	4488.7	4587.1	4958.6	4809.2	4870.8	4004	4097.2	3955 3	3796.4	4163.5	4442.1	4628.8	5017.7	5226.9	4005.8	3573.9	3482.8	3538.0	3431.0	3602.2	3476.8	3828.0	5163.3	5783.5	5475.6	5087.4	5625.5	5627.7	4866.3	4700.2	3737.2	3395.4	3424.8	4237.4	5398.9	5297.7	5355.3	5144.6	3740.7	3433.9	3386.0	3633.5	7
Common Stack C SQ2	(Lb/mm8tu) !	1.9963	1.9734	1.9965	2.0023	2.0022	2.0049	1.985U	1.9882	1.99/2	1.9766	1 9803	1.9753	1.9576	1.9592	1.9444	1.9370	1.9394	1.9212	1.8905	1.8824	1.8702	1.8600	1.8600	1.8505	1.8369	1.8802	1.8794	1.8730	1.8629	1.8622	1.8568	1.8631	1.8750	1.8622	1.8389	1.8391	1.8796	1.8852	1.8764	1.8773	1.8830	1.8542	1.8509	1.8515	1.8496	F.000.1
ommon Stack		615.8	606.4	675.3	849.6	886.6	991.8	954.2	1.026	0.4/8 0.4/8	841.6	729.0	693.8	778.4	852.5	859.4	891.1	970.2	838.2	744.9	716.0	694.3	702.8	703.0	712.1	737.7	1016.1	1224.8	1090.4	939.4	1087.5	1103.2	856.7	842.3	662.3	266.8	549.3	689.8	988.0	976.9	978.4	942.6	720.2	625.2	605.3	650.2)
Common Stack Common Stack		0.3430	0.3370	0.3240	0.3790	0.3870	0.4010	0.5890	03/80	0.3770	0.4060	0.4050	0.3610	0,3660	0.3760	0.3610	0.3440	0.3600	0.4020	0.3940	0.3870	0.3670	0.3810	0.3630	0.3790	0.3540	0.3700	0.3980	0.3730	0.3440	0.3600	0.3640	0.3280	0.3360	0.3300	0.3070	0.2950	0.3060	0.3450	0.3460	0.3430	0.3450	0.3570	0.3370	0.3310	0.3310	0.010
Common Stack Heat Input	(mmBtul)	1795.4	1799.3	2084.3	2241.8	2291.0	2473.3	2453.0	2449.9	2320.7	2072.8	2009.5	1921.9	2126.8	2267.3	2380.6	2590.5	2695.1	2085.1	1890.5	1850.2	1891.8	1844.6	1936.7	1878.8	2083.9	2746.1	3077.3	2923.4	2730.9	3020.9	3030.9	2612.0	2506.8	2006.9	1846.4	1862.2	2254.4	2863.8	2823.4	2852.6	2732.1	2017.4	1855.3	1828.8	1964.5	T000'0
49	*.	100	100	119	127	130	148	146	145	131	102	101	105	105	118	130	140	159	118	107	103	105	101	108	105	120	160	176	174	153	171	173	145	144	116	102	101	117	164	167	170	126	116	104	102	119	o n
*S -	_	86	86	109	120	126	127	127	126	127	125	071	9 2	128	134	134	147	143	115	102	100	102	66	103	66	109	144	170	156	153	167	169	149	136	106	66	101	130	157	148	148	150	107	66	95	<u>8</u> 5	707
Y Date/Hour		02-09-2015 04	02-09-2015 05	02-09-2015 06	02-09-2015 07	02-09-2015 08						02-09-2015 14			02-09-2015 18	02-09-2015 19	02-09-2015 20	02-09-2015 21		02-09-2015 23		02-10-2015 01	02-10-2015 02	02-10-2015 03	02-10-2015 04		02-10-2015 06	02-10-2015 07	02-10-2015 08	02-10-2015 09	02-10-2015 10	02-10-2015 11	02-10-2015 12	02-10-2015 13	02-10-2015 14	02-10-2015 15	02-10-2015 16	02-10-2015 17	02-10-2015 18	02-10-2015 19	02-10-2015 20		02-10-2015 22			02-11-2015 01	

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

HF (lb/hr)	16.64223	17.75976	18.1249	18.33227	13.06912	11.20159	12.40697	11.72629	14.77649	18.25279	15.20737	14.61992	17.11076	15.51275	15.90777	18.1506	18.50139	17.81892	16.85438	14.57032	9.820518	7.886056	9.946016	9.583267	9.670518	9.922709	9.738048	9.7416937	9.207371	8.407769	9.050199	8.938446	8.856574	8.893028	0.00000	8.552348	9.576693	9.319721	9,473904	9.10996	9.38247	7.081673
HCI (lb/hr)	133.1378	142.0781	144.9992	146.6582	104.553	39.61275	99.25578	33.81036	118.212	146.0223	145.659	116.9594	136.8861	124.102	127.2622	145.2048	148.0112	142.5514	134.8351	116.5675	78.56414	53.08845	79.56813	76,66614	77.36414	79.38167	77.90438	78 53546	73.65896	67.26215	72.40159	71.50757	70.85259	71.14422	100000T	59.50559	76 61355	74.55777	75.79124	72.87968	75.05976	56.65339
Mercury (lb/hr)	_	•••		0.010144		•	٠,	٠.		•	0.010075				•				0.009326	0.00000	0.005434	0.004364 (0.005503			0.005491	0.005388	0.00533	. 560500.0	0.004652	0.005008	0.004946	0.004901	0.004921	467000	0.004/95	005299	0.005157	0.005242	0.005041	0.005192	0,003919
Mercury M (lb/TBu)		3.3068 0.	_	3.3068 0.	_	_	3.3068 0.	_	0	•	3.3068 0.	,	0	_	_	_	_	`	3,3068 0.3	_	_	_	_	_	_	_	3.3058 0	_	_	_	_	_		3,3068 0		3.3068 0	-	_		_	_	3.3068 0
							0.03474 3												0.047192								0.02/26/							0.0249		0.024256				0.025508		0.019829
Lead (lb/hr)	_	0		•	_			_	_	_		_		_	_	_	_		5	C	_		_	_	_	_			_	_	_	_	o	•				_	_	Ξ.	_	
PM-10 (Lb/Hr)	,	m		384.9838		7	250.5506	٠.	• •	• • •	382.3609	,		325.7729		,	- , .	.,	5 353.9477 5 acc coad					• •	• •			0//c.402 c	•		• •	П		_ ,		2 181.9248	•	•		5 191.3122		5 148.7175
PM=10 (lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1253	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1253	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	110.95	118.40	120.83	122.22	87.13	74.68	82.71	78.18	98.51	121.69	121.38	97.47	114.07	103.42	106.05	121.00	123.34	118.79	112.36	07.17	65.47	52.57	66.31	63.89	64.47	66.15	64.92	54.94 57.40	61.38	56.03	60.33	59.59	59.04	59.29	55.28	57.75	0.00	67.13	63.16	60.73	62.55	47.21
	1.00	1.00	1.00	9 5	9 5	1.00	1.00	1.00	1.00	1.00	9 5	9 6	1.00	1.00	1.00	1.00	1.00	F. 60	1.00	9 6	1.00	1.00	1.00	1.00	1.00	1.00	9 6	9 9	8 6	1.00	1.00	1.00	1.00	1.00	00,7	9: 6	3 5	8 6	1.00	1.00	1.00	1.00
Slack Unit	285.7	304.9	311.2	314.7	T:567	192.3	213.0	201.3	253.7	313.4	312.6	251.0	293.8	266.3	273.1	311.6	317.6	305.9	289.4	250.0	720.T	135.4	170.8	164.5	166.0	170.4	167.2	16/.2	158.1	144.3	155.4	153.5	152.0	152.7	151.2	148.7	164.7	160.0	162.7	156.4	161.1	121.6
coz (Tc	0	· ·			0.0	0.	9.	εŭ	6,	e;	4. (j ná	.∞.	۲.	o.	7	7.		oj r	ήr	; <u>0</u>	14	9	77	9	<u>.</u>	თ !	<u></u>	, 20	8.	0:0	.5	0	æ, .	ָּיִרָּ נָּיִרָּ קיי	7.	7 5	,		7.	5.5	7.4
Common Stack Common Stack Unit Operation SO2 (Lbritr) CO2 (TonsHr) (minuses)	5818.0	6253.0	6357.6	6405.9		3		4095.5		6490.9	6476.4			5464.1						2521.2 51117								3362.7							•		2.0026					2437.4
Common Slack SO2 (Lb/mmBu)	2.0892	2.1041	2.0962	2.0882	2.0840	2.0700	2.0854	2.0872	2.1143	2.1252	2.1257	2.1050	2.0983	2.1050	2.1083	2.1017	2.1117	2.1208	2.1083	2.0338	1 9426	2.0365	2.0445	2.0518	2.0418	2.0319	2.0693	2.0629	2.1009	2.0753	2.0972	2.0729	2.0661	2.0602	2.0562	2.0266	2.04/3	7,007	2.0504	2.0475	2.0672	2.0569
mmon Stack NOx Lb/Hr	1055.4	1188.7	1267.8	11994		641.0	799.3	710.3	1013.8	1194.2	1160.8	990.8	1062.2	937.1	968.9	1190.6	1213.6	1115.2	1006.8	1011.3	6310	588.5	775.6	702.4	695.8	705.7	721.9	720.5	676.4	609.2	646.6	685.0	665.4	672.6	739.8	656.7	, 66.8 1.00.8	745.4	741.9	692.1	726.9	578.3
Common Slack Common Stack NOx Lb/mmBtu NOx Lb/Hr	0.3790	0.4000	0.4180	0.3910	0.4160	0.3420	0.3850	0.3620	0.4100	0.3910	0.3810	0.3730	0.3710	0.3610	0.3640	0.3920	0.3920	0.3740	0.3570	0.3570	0.3500	0.4460	0.4660	0.4380	0.4300	0.4250	0.4430	0.4420	0.4410	0.4330	0.4270	0.4580	0.4490	0.4520	0.4710	0.4530	0.4790	0.4870	0.4680	0.4540	0.4630	0.4880
Common Stack Con Heat Input NO	2784.8	2971.8	3032.9	3067.6	5,958.9	1874.4	2076.1	1962.2	2472.6	3054.3	3046.7	2625.4	2863.2	2595.8	2661.9	3037.2	3095.9	2981.7	2820.3	2832.7	16433	1319.6	1664.3	1603.6	1618.2	1660.4	1629.5	1630.1	1540.7	1406.9	1514.4	1495.7	1482.0	1488.1	1570.8	1449.6	1605.1	1650 5	1585.3	1524.4	1570.0	1185.0
는 도 는 도	-	m	N	۰.	9		w	so	æ	0	н (v c	່ເພ		7	10	0	io.	ų,	ָם.	3 k	, 0	0	0	0	0	0	0 (. .	. 0	0	0	0	0	0	0 1	5 (.	3 C	. 0	0	0
YT02 Gross Load MW Value	17.	173	175	170	136	9, 19	126	106	128	170	171	147	163	131	127	165	170	155	136	g ;	ξ.						-												-			
YT01 Gross Load MW Value	134	159	164	167	158	777 38	9 6	102	138	169	170	150	151	53	164	166	170	171	170	69 6	128	128	168	161	165	165	166	166	55	146	157	158	153	154	163	148	. F	164	163	155	163	123
1.7	015 02		015 04			015 07			015 11	015 12		015 14		015 17	015 18	015 19		015 21	015 22	015 23	015 00	015 02		015 04	1015 05	1015 06			50.25 US			02-14-2015 13	02-14-2015 14	02-14-2015 15	2015 16	2015 17		2015 19		015 22	2015 23	2015 00
Date	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015 02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-13-2015	02-14-2015	02-14-2015	02-14-2015	02-14-2015	02-14-2015	02-14-2015	02-14-2	02-14-2015	02-14-2015	02-14-2015	02-14-2015	02-14-2	02-14-2	02-14-2	02-14-2015	02-14-2015	02-14-2015	02-14-2015	02-14-2015	02-14-2015	02-14-2015	02-15-2015

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HF (lb/hr)	5.788446	7.914741	9.182869	9.249203	9.294024	9,248606	9.730279	10.01892	9.85996	9.962749	9.894622	9.944821	9.951992	9.864741	9.488247	9.731474	9.932271	9.972311	9.935259	9.899402	9.914343	10.04462	9.968127	7.416335	5.894223	8.424502	10.18984	10.01056	9.335857	9.787649	10.06494	9.864143	9.998008	9.959761	10.00279	10.00279	56/T6.6	9.905378	9.886853	9.950199	9.905976	9.94004	9.916733	9.913147	9.909562	9.923904	9.893426
HCI (lb/hr)	46.30757	53.31793	73.46295	73.99363	74.35219	73.98884	77.84223	30.15139	78.87968	79.70199	79.15697	79.55857	79.61594	78.91793	75.90598	77.85179	79.45817	79.77849	79.48207	79.19522	79.31474	80.35697	79.74502	59.33068	47.15378	67.39602	81.51873	80.08446	74.68685	78.3012	80.51952	78.91315	79.98406	79.67809	80.02231	80.02231	79.53865	79.24303	79.09482	79.60159	79.24781	79.52032	79.33386	79.30518	79.27649	79.39124	79.14741
Mercury (Tb/hr)	0.003203	_	0.005081	0.005118	0.005143	0.005118	0.005384	0.005544 8	0.005456	0.005513	0.005475	0.005503	0.005507	0.005458	0.00525	0.005385	0.005496	0.005518	0.005498	0.005478	0.005486	0.005558	0.005516	0.004104	0.003261	0.004662	0.005638	0.005539	0.005166	0.005416	0.005569	0.005458	0.005532	0.005511	0.005535	0.005535	0.005488	0.005481	0.005471	0.005506	0.005481	0.0055	0.005487	0.005485	0.005483	0.005491	0.005474
Mercury N (Ib/TBtu)	3.3068 0.		3.3068 0.	3.3068 0.			_	_	_	_	_	_	_	_		_	_	3.3068 0.	3.3068 0	3.3068 0.	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	-	_	3.3068 0
	0.016208	0.022161	0.025712	0.025898	0.026023	0.025896	.027245	0.028053	0.027608	0.027896	0.027705	0.027845	0.027866	0.027621	0.026567	0.027248	0.02781	0.027922	0.027819	0.027718	0.02776	0.028125	0.027911	0.020766	0.016504	0.023589	0.028532	0.02803	0.02614	0.027405	0.028182	0.02762	0.027994	0.027887	0.028008	0.028008	0.027769	0.027735	0.027683	0.027861	0.027737	0.027832	0.027767	757720.0	0.027747	0.027787	0.027702
PM-10 Lead (lb/hr)	121.5593 0.	_	192.8433 0.	194,2364 0.	_	_	_	_	_	_	_	_	_	_	_	_		_	208.6438 0	207.8908 0	208.2045			_	_	_	_			_	0		_	_	_	_	_	-	_		_	_	_	_		_	207.7653 0
PM-10 (Ib/mmBtu)	0.1255 1		0.1255 1	0.1255 1						0.1255 2				0.1255 2	0.1255 1	0.1255 2	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255			• •				• •	•	•		• •				-		0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coat tonsthr (It	38.59	52.76	61.22	61.66	61.96	61.66	64.87	62.99	65.73	66.42	65.96	66.30	66.35	65.76	63.25	64.88	66.22	66.48	66.24	66.00	66.10	96.99	66.45	49.44	39.29	56.16	67.93	66.74	62.24	65.25	67.10	65.76	66.65	66.40	69.99	69.99	66.12	66.04	65.91	66.33	66.04	66.27	66.11	60.99	90'99	66.16	96.39
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
non Stack Common Stack Common Stack Unit Operation \$502 xt.EhHr (Chimetu) (Common Stack Unit Operation (Chimetes)	99.4	135.9	157.7	158.8	159.6	158.8	167.0	172.0	169.3	171.0	169.9	170.7	170.9	169.4	162.9	167.1	170.5	171.2	170.6	170.0	170.2	172.5	171.1	127.3	101.2	144.6	174.9	171.9	160.3	168.0	172.8	169.4	171.6	171.0	171.7	171.7	170.3	170.1	169.7	170.8	170.1	170.7	170.3	170.2	170.1	170.4	169.9
SOZ. (Lb/Hr) C	1990.7	2744.7	3180.5	3164.2	3100.2	3110.2	3266.8	3323.9	3286.4	3312.0	3319.6	3287.7	3274.1	3290.4	3179.5	3276.7	3357.1	3371.9	3386.4	3388.1	3400.1	3414.0	3412.4	2493.3	1960.5	2850.1	3476.4	3439.0	3174.2	3354.2	3434.9	3382.6	3438.0	3403.4	3408.7	3417.5	3430.2	3422.8	3431.2	3444.8	3441.6	3437.5	3440.5	3433.6	3422.0	3425.2	3415.9
Soz Soz (Lb/mmBtu)	2.0552	2.0724	2.0698	2.0445	1.9934	2.0097	2.0064	1.9826	1.9919	1.9867	2.0050	1.9757	1.9661	1.9933	2.0026	2.0122	2.0199	2.0207	2.0369	2.0453	2.0495	2.0312	2.0458	2.0091	1.9877	2.0218	2.0388	2.0530	2.0319	2.0480	2.0395	2.0493	2.0550	2.0421	2.0365	2.0418	2.0670	2.0650	2.0740	2.0689	2.0763	2.0667	2.0733	2.0699	2.0637	2.0626	2.0634
NOx Lb/Hr	425.2	556.2	723.7	741.3	732.5	719.6	775.0	9.777	773.8	768.5	778.2	767.2	752.7	751.1	693.8	724.6	756.2	781.0	798.0	780.2	774.8	741.2	753.9	590.7	424.1	579.4	769.0	773.9	685.8	732.1	761.3	742.8	741.1	741.6	729.8	744.8	746.8	744.2	741.2	750.9	749.2	755.1	751.7	753.1	752.8	755.6	754.9
YT02 Gross Common Stack Common Stack Comm Load MW Heat Input NOx Lb/mmBtu NOX Value (mmBtu)	0.4390	0.4200	0.4710	0.4790	0.4710	0.4650	0.4760	0.4640	0.4690	0.4610	0.4700	0.4610	0.4520	0.4550	0.4370	0.4450	0.4550	0.4680	0.4800	0.4710	0.4670	0.4410	0.4520	0.4760	0.4300	0.4110	0.4510	0.4620	0.4390	0.4470	0.4520	0.4500	0.4430	0.4450	0,4360	0.4450	0.4500	0.4490	0.4480	0.4510	0.4520	0.4540	0.4530	0.4540	0.4540	0.4550	0.4560
Ommon Stack Heat Input (mmBtu)	968.6	1324.4	1536.6	1547.7	1555.2	1547.6	1628.2	1676.5	1649.9	1667.1	1655.7	1664.1	1665.3	1650.7	1587.7	1628.4	1662.0	1668.7	1662.5	1656.5	1659.0	1680.8	1668.0	1241.0	986.3	1409.7	1705.1	1675.1	1562.2	1637.8	1684.2	1650.6	1673.0	1666.6	1673.8	1673.8	1659.5	1657.5	1654.4	1665.0	1657.6	1663.3	1659.4	1658.8	1658.2	1660.6	1655.5
T02 Gross C Load MW Value	c		0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT01 Gross Y Load MW Value	86	13.5	163	164	164	164	167	170	170	170	170	170	170	170	162	166	170	170	171	171	171	171	171	126	86	138	171	170	157	165	170	167	170	170	170	170	170	170	170	170	169	170	170	170	170	170	170
Dere/Hour	02-15-2015 01			02-15-2015 04	02-15-2015 05	02-15-2015 06	02-15-2015 07	02-15-2015 08	02-15-2015 09	02-15-2015 10	02-15-2015 11	02-15-2015 12	02-15-2015 13	02-15-2015 14	02-15-2015 15	02-15-2015 16		02-15-2015 18	02-15-2015 19	02-15-2015 20	02-15-2015 21		02-15-2015 23	02-16-2015 00	02-16-2015 01	02-16-2015 02	02-16-2015 03	02-16-2015 04	02-16-2015 05	02-16-2015 06	02-16-2015 07	02-16-2015 08	02-16-2015 09	02-16-2015 10	02-16-2015 11	02-16-2015 12	02-16-2015 13	02-16-2015 14	02-16-2015 15	02-16-2015 16	02-16-2015 17	02-16-2015 18	02-16-2015 19	02-16-2015 20		02-16-2015 22	02-16-2015 23
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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6.52311 6.52331 6.52331 1.6.50259 10.03267 10.12769 10.03267 10.0313506 9.684861 9.684861 9.351992 6.230677 0.86924 0.849203 0.841434 0.700996 0.8440337	<u> </u>
25.17849 25.17849 26.025817 77.43586 80.26135 80.41434 79.93625 74.78247 77.478247 77.478247 77.478247 77.478247 77.478247 77.478247 77.478247 77.478247 77.478247 77.478247 77.478247 86.573547 6.551394 6.751693 6.751693 6.751693 6.751693	77.47888 74.81594 49.84542 20.6247 6.951394 6.793625 6.750598
0.003869 0.003598 0.004168 0.005551 0.005552 0.005529 0.005529 0.005529 0.005529 0.005529 0.005535 0.00548 0.000481 0.000466 0.000466	.005359 .005175 .003448 .001427 .000481 .000047 .000467
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136,3707 136,556 138,1802 203,2724 210,6894 211,091 209,836 196,305 196,305 196,305 196,305 196,305 196,305 17,7206 17,7206 17,7206 17,7206 17,7206 17,7206	2
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1,9301 1,9613 1,01982 1,0396 1,9308 1,9573 1,9573 1,9573 1,9114 1,9220 1,9049 0,0999 0,0999 0,00996 0,00896	1.9220 1.9049 1.7641 1.2478 0.1045 0.0999 0.0999
553.1 448.6 486.5 646.3 736.7 736.7 736.7 736.7 736.7 736.7 737.3 736.1 531. 53.1 53.1 53.1 53.1 53.1 53.1 53	680.7 657.3 346.1 53.1 3.1 2.8 2.8 2.8
0.4330 0.4010 0.4020 0.3860 0.3886 0.4280 0.4380 0.4380 0.4180 0.4180 0.4180 0.4200 0.4200 0.4200 0.4200 0.01331 0.0193 0.0193	0.4200 0.4200 0.3320 0.1231 0.0213 0.0198 0.0198
33.1.1 991.4 991.4 991.4 992.0 992.0 992.0 992.0 992.0 992.4 993.4 140.8 140.8	20.6 64.9 42.6 31.4 45.4 42.1 41.2
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129 0 1231.1 115 0 1091.4 118 0 1091.4 155 0 1692.7 170 0 1678.8 171 0 1682.0 171 0 1682.0 171 0 1682.0 171 0 1682.0 152 0 1568.5 149 0 1568.5 156 0 1564.2 15 0 1564.2 15 0 1564.2 15 0 1564.2 16 0 1564.2 17 0 1564.2 18 0 1564.2 19 0 1564.2 10 0 142.4 10 0 142.4 11 1 142.1 11 1 142.1 12 0 143.7	11 156 0 1620.6 12 151 0 1564.9 13 85 0 1042.6 14 19 0 431.4 15 0 0 145.4 16 1 1 142.1 17 0 0 140.8 18 0 140.8

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)		0 (9 6	>	0	0	0	0	0	0	0	0 (5 6	5 6	5 (- •	-	0 (9 (9 (Э (0	0		U	0					,	J ,											_	_
HC! (lb/hr)		0 (-	- C	0	0	0	0	0	0	0	0 1	-	-	5 (5 (5 (0	0 (- •	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (9	0 '	0 (0	0 (ο ·	0 (9	0 (0	0	0
Mercury (lb/hr)		0 (5 0	o c	0	0	0	0	0	0	0	0	0 (- (э (0 (Э 1	0	0	-	o (0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0 (0 (0 (0	0	0	0	0
Mercury (lb/T8tu)	•	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000
Lead (lb/hr)	:	0	0 0	5 C	0	0	0	0	0	0	0	0	0 (0 (5 (Б 1	0	0	0	o (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (Lb/Hr)	:	0	0 (> C	0	0	0	0	0	0	0	0	0 (0 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (Ib/mmBtu)	:	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr		0.00	0.00	9 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mmon Stack U	<u>:</u>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack Common Stack Unit Operation SOZ (LbAt) CO2 (Tons/Hr) (minutes)	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0'0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SO2		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ommon Stack NOx Lb/Hr	-	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack NOx Lb/mmBtu NOx Lb/Hr	- : :	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.0000
Common Stack Co	. I	0.0	0.0	0.0	9 0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YT02 Gross Co Load MW	value	0	0	0 (0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92		0	0	0 (-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	a	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Date/Hour		02-18-2015 23			02-19-2015 02			02-19-2015 06	02-19-2015 07	02-19-2015 08	02-19-2015 09	02-19-2015 10			02-19-2015 13	02-19-2015 14	02-19-2015 15	02-19-2015 16	02-19-2015 17	02-19-2015 18	02-19-2015 19	02-19-2015 20	02-19-2015 21	02-19-2015 22	02-19-2015 23	02-20-2015 00	02-20-2015 01	02-20-2015 02	02-20-2015 03	02-20-2015 04	02-20-2015 05	02-20-2015 06	02-20-2015 07	02-20-2015 08	02-20-2015 09	02-20-2015 10	02-20-2015 11	02-20-2015 12	02-20-2015 13	02-20-2015 14	02-20-2015 15	02-20-2015 16	02-20-2015 17	02-20-2015 18	02-20-2015 19	02-20-2015 20	

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

Date/Hour	YT01 Gross	T02 Gross Load MW	Common Stack Heat Input	Common Stack NOx Lb/mmBtu	Common Stack Common Stack SON NOX Lb/mmBtu NOX Lb/Hr It MmmBtu	Common Stack Common Stack SO2 (Lb/Hr)	Sommon Stack C SO2 (Lb/Hr) C	Common Stack Unit Operation CO2 (Tons/Hr)	- ⊨	Coal tons/hr	PM-10 (b/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCI ((b/hr))	HF (lb/hr)
	-	200		- - -		1	.	•	:						•		C
02-20-2015 22	0	0	0.0		0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	o •	0.0000	5 (5 (- 0
02-20-2015 23	0	0	0.0			0.0000	0.0	0.0	0.00	0.00	0.1255	0	0 (0.0000)	> (- (
02-21-2015 00	0	0	0.0			0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0 (0 1	0 (
02-21-2015 01	0	0	0.0			0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0 (о (o (
02-21-2015 02	0	0	0.0			0.0000	0.0	0.0	0.00	0.00	0.1255	0	0 '	0.0000	0 '	0 (.
	0	0	0.0			0.0000	0.0	0.0	0.0	0.00	0.1255	0 (0 (0.0000	0 (5 6	-
02-21-2015 04	0	0	0.0			0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	Э 1	Э (- (
02-21-2015 05	0	0	0.0		0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 06	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 07	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 08	0	0	0.0	0.0000		0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.000	0	0	0
02-21-2015 09	0			0.0000		0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 10	0	0	0.0	0.0000		0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 11	0	0		0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 12	0	0		0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 13	0	0	0.0	0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 14	0	0		0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	0	0		0.0000	0.0	0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
						0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 17	0	0				0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 18	0					0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02-21-2015 19						0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
02,21,2015,20	· c	· C				0000'0	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	, 0					0.0000	0.0	0.0	0.00	0.0	0.1255	0	0	0.0000	0	0	0
	c					0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
	0					0.0000	0.0	0.0	0.00	0.00	0.1255	0	0	0.0000	0	0	0
		0		atro-con-		0.0000	0.0	0.0	0.30	10.0	0.1255	0.03765	5.02E-06	3.3068	9.92E-07	0.014343	0.001793
	0	. 0				0.0000	0.0	6.4	1.00	2.49	0.1255	7.8563	0.001047	3.3068	0.000207	2.992829	0.374104
02-22-2015 02	0	. 0				0.0000	0.0	9.1	1.00	3.51	0.1255	11.0691	0.001476	3.3068	0.000292	4.216733	0.527092
02-22-2015 03	0	0	г			0.000	0.0	10.3	1.00	4.01	0.1255	12.63785	0.001685	_	0.000333	4.814343	0.601793
02-22-2015 04	0	0	92.7	0.0410	3.8	0.0453	4.2	9.5	1.00	3.69	0.1255	11.63385	0.001551	_	0.000307	4.431873	0.553984
	0	0	96.9	9 0.0392	3,8	0.0041	0.4	6.6	1.00	3.86	0.1255	12.16095	0.001621		0.00032	4.632669	0.579084
02-22-2015 06	0	0	94.2	2 0.0403	3.8	0.0000	0.0	9.7	1.00	3,75	0.1255	11.8221	0.001576		0.000311	4.503586	0.562948
02-22-2015 07	0	0	93.0	0.0409		0.0000	0.0	9.5	1.00	3.71	0.1255	11.6715	0.001556		0.000308	4.446215	0.555777
02-22-2015 08	0	•		2 0.0401		0.0000	0.0	9.5	1.00	3.67	0.1255	11.5711	0.001543		0.000305	4.407968	0.550996
02-22-2015 09	0	0	92.5	5 0.0389		0.0000	0.0	9.5	1.00	3.69	0.1255	11.60875	0.001548		0.000306	4.422311	0.552/89
02-22-2015 10	0	0	92.4	4 0.0390		0.0000	0.0	9.5	1.00	3.68	0.1255	11.5962	0.001546		0.000306	4.41753	0.552191
02-22-2015 11	0	0		3 0.0811		0.2362	30.3	13.2	1.00	5.11	0.1255	16.10165	0.002147		0.000424	6.133865	0.766/33
02-22-2015 12	62	0		3 0.3090		1.6451	1073.9	67.0	1.00	26.01	0.1255	81.9264	0.010923		0.002159	31.20956	3.901195
02-22-2015 13	100	0		9 0.3230		2.0369	2101.9	105.9	1.00	41.11	0.1255	129.5035	0.017267		0.003412	49.33386	6.166733
02-22-2015 14	105	٥		7 0.4050		2.0657	2170.4	107.8	1.00	41.86	0.1255	131.8629	0.017581		0.003474	50.23267	6.279084
02-22-2015 15	102	o	1017.6	5 0.3680	374.5	2,0545	2090.7	104.4	1.00	40.54	0.1255	127.7088	0.017028		0.003365	48.6502	6.081275
02-22-2015 16	137	0		9 0.3970		2.0855	2854.8	140.5	1.00	54.54	0.1255	171.797	0.022906		0.004527	65.44542	8.1806//
02-22-2015 17	155	J	1528.5	5 0.4570		2.0610	3150.3	156.8	1.00	60.90	0.1255	191.8268	0.025576		0.005054	73.0757	9.134462
02-22-2015 18	170	0		9 0.4740			3408.8	166.7	1.00	64.74	0.1255	203.925	0.02719	3.3068	0.005373	77.68446	9.710558
02-22-2015 19	170	0	1628.2	2 0.4760	775.0		3436.9	167.0	1.00	64.87	0.1255	204.3391	0.027245	3.3068	0.005384	77.84223	9.730279
02-22-2015 20	170	J	1628.8	9 0.4780	778.6	2.1299	3469.1	167.1	1.00	64.89	0.1255	204.4144	0.027255	3.3068	0.005386	77.87092	9.733865

YT01 Date/Hour Date/Hour	YT01 Gross Y Load MW Value	T02 Gross Load MW Value	Common Stack Heat Input (mmBlu)	YT02 Gross Common Stack Common Stack Comm. Load MW Heat input NOX Lb/mmBtu NOX Value	Common Stack NOx Lb/Hr	Common Stack SO2 (Lb/mm8tu)	on Stack Common Stack Common Stack Common Stack Unit Operation (Lb/Hr QO2 (Tons/Hr) (minutes)	Common Stack CO2 (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (ib/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury (lb/hr)	HCI (lb/hr)	HF (lb/hr)
02-22-2015 21	166	0	1593.9	0.4750	757.1	2.1146	3370.4	163.5	1.00	63.50	0.1255	200.0345	0.026671	3.3068	0.005271 7	-	9.525299
02-22-2015 22	146	0	1405.7		674.7	2.0992	2950.8		1.00	26.00	0.1255	176.4154	0.023522		0.004648 6	57.20478	3.400598
02-22-2015 23	125	0	1227.9	0.4780	586.9	2.0971	2575.0	•••		48.92	0.1255	154.1015	0.020547			58.70438	7.338048
	123	0	1211.9		595.0	2.1153	2563.5	124.3		48.28	0.1255	152.0935	0.020279	3.3068	0.004007	57.93944	7.24243
	112	0	1098.3		512.9	2,1183	2326.5	112.7	00.1	43.70	0.1255	127.0307	0.0100.0			75.30037 AE 0251	769077
02-23-2015 02 02-23-2015 02	86 8	0 0	960.6	0.4510	433.2	2.1108	2027.6	98.6		38.30	0.1255	120,6432	0.016085	_		45.95857	5.744821
	5 1	, c	1092.0		446.6	2.1368	2333.4	112.0		43.51	0.1255	137.046	0.018273	_	0.003611 9	52.20717	6.525896
	131	. 0	1299.2		593.7	2.1339	2772.4	133.3		51.76	0.1255	163.0496	0.02174			52.11315	7.764143
	156	0	1506.2		671.8	2.1510	3239.8	, .		60.01	0.1255	189.0281	0.025203	_		72.00956	9.001195
	156	0	1513.0	0.4660	705.1	2.1443				60.28	0.1255	189.8815	0.025317	_		72.33466	9.041833
02-23-2015 08	164	0	1547.2	0.4740	733.4	2.1750	3365.2			61.64	0.1255	194.1736	0.025889			73.96972	9.246215
02-23-2015 09	163	0	1541.3		741.4	2.1691		•		61.41	0.1255	193,4332	0.025791			73.68765	9.210956
02-23-2015 10	153	0	1467.5	0.4870	714.7	2.1700		•		58.47	0.1255	184.1713	0.024556			70.15936	8.76992
02-23-2015 11	161	0	1532.4	0.4810	737.1	2.1805			.,	61.05	0.1255	192.3162	0.025642			73.26215	9.157769
02-23-2015 12	163	0	1552.6		743.7			•••	•	61.86	0.1255	194.8513	0.02598			74.22789	9.278485
02-23-2015 13	163	0	1559.4		•			•		62.13	0.1255	195.7047	0.026094		0.005157	74.55299	9.319124
02-23-2015 14	160	0	1531.2		•	2.1337		•	•	61.00	0.1255	192.1656	0.025622	_	0.005005	/3.204/8	9.150598
02-23-2015 15	157	0				2.1022		•	•	60.51	0.1255		0.025416		0.005023	72.616/3	260//08
02-23-2015 16	162	0				2.0960		•	• •	61.50	0.1255	- 1	0.025831		0.005105	43.80239	9.22529
02-23-2015 17	163	0	1557.3		•	2.0938			•	62.04	0.1255	195.4412	0.026058			/4.45259	9.3065/4
02-23-2015 18	164	0			•	2.0886				62.15	0.1255	195.7675	0.026102			74.57689	9.322112
02-23-2015 19	167	0	1613.9			2.1034				64.30	0.1255		0.027005		0.005337	77.15857	9.644821
02-23-2015 20	164	0	1553.5	5 0.4400					1.00	61.89	0.1255		0.025995		0.005137	74.27092	9.283865
02-23-2015 21	163	0								61.92	0.1255	195.0647	0.026008	3.3068	0.00514	74.30916	9.288645
02-23-2015 22	164	0						•		62.26	0.1255	196.1314	0.02615	3.3068	0.005168	74.71554	9.339442
02-23-2015 23	167	0								63.54	0.1255		0.026688	3.3068	0.005274	76.2502	9.531275
02-24-2015 00	167	0		2 0.4410					•	63.47	0.1255		0.026659	3.3068	0.005268	76.16892	9.521116
02-24-2015 01	167	0			_					63.37	0.1255	•	0.026614	3.3068	0.005259	76.03984	9.50498
02-24-2015 02	167	0				2.1029		•		63.43	0.1255		0.026641	3.3068	0.005265	76.11633	9.514542
02-24-2015 03	167	0						•		63.50	0.1255		0.026669	3.3068	0.0052/	/6.19/61	9.524701
02-24-2015 04	167	0	1598.4							63.68	0.1255		0.026746	3.3068	0.005286	/6.41/53	9.552191
02-24-2015 05	169	0			, .	2.0923			•	64.75	0.1255		0.027193	3.3068	0.005374	77.69402	9.711753
02-24-2015 06	169	0			•	2.1084		•		65.03	0.1255		0.02/313	3.3068	0.005398	78.03825	9.754781
02-24-2015 07	166	0				2.1084				63.77			0.026/83	3.3058	0.005293	1/275.0/	9.555339
02-24-2015 08	169	0						•					0.02/534	5.3068	0.005441	78.66937	9.833565
02-24-2015 09	170	0	•					•			0.1255		0.027499	3.3068	0.005434	78.55892	9.821116
02-24-2015 10	165	0			•			•			0.1255		0.025545	3.3068	0.005266	/6.13U58	9.516335
02-24-2015 11	167	0			_			•	•				0.026596	3.3068	0.005256	75.98/25	9.498405
	169	0			•				, ,	_			0.02/124	3.3068	0.00536	10864.//	7,6633.0
	170	0								-	0.1255		0.02/05/	3.3056	/#cc00.0	7/0000.77	9.000347
	169	0				2.1503					0.1255	• •	0.02 / 205	3.5068	0.000375	17751.11	9.7 I0334
	169	0			-						0.1255	•	0.02/143	3.3098	0.00004	000007	9.093043
	170	0										• •	0.027484	3.3068	0.005451	50,007 2010 PT	9.0137.57
	169	0		_		•		•					0.027584	3.3068	0.005451	C/7T9'9/	9.631334
	171	0			, `			•				. 7	0.02/6/8	3,3058	0.00547	79.08048	9.88500
02-24-2015 19	170	0	1656.9	9 0.4600	762.2	2.1734	3601.1	170.0	1.00	66.01	0.1255	207.941	0.027725	3.3068	0.005479	79.21434	9.901/93

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

Date/Hour	01 Gross oad MW	YT02 Gross Load MW	Common Stack Common Stack Heat input NOx Loumblu	mmon Stack C	Common Stack Common Stack Common Stack Common Stack Unit Operation Coal tonshr NOx Librir (minus) Coal tonshr Stack Common Stack (Indicated Coal tonshr)	SO2	ommon Stack 102 (Lb/Hr)	Common Stack CO2. (Tons/Hr)	Unit Operation (minutes)	Coal tons/hr	PM-10 (lb/mmBw)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (ib/TBtu)	Mercury (lb/hr)	HCI (lb/hr)	HF (lb/hr)
	Value		III(SUE)	-	4 mm - 1 mm			- : :		<u> </u>	-						
02-24-2015 20	170	0	1648.8	0.4610	760.1	2.1787	3592.3	169.2	1.00	62.69	0.1255	206.9244	0.027589		0.005452	78.82709	9.853386
02-24-2015 21	169	0	1663.7	0.4520	752.0	2.1681	3607.0	170.7	1.00	66.28	0.1255	208.7944	0.027839	_	0.005501	79.53944	9.94243
02-24-2015 22	170	0	1632.1	0.4580	747.5	2.1667	3536.3	167.5	1.00	65.02	0.1255	204.8286	0.02731	_	0.005397	78.02869	9.753586
02-24-2015 23	168	0	1613.8	0.4500	726.2	2.1206	3422.3	165.6	1.00	64.29	0.1255	202.5319	0.027004	3.3068	0.005336	77.15378	9.644223
02-25-2015 00	116	0	1106.4	0.5060	559.8	2.0502	2268.3	113.5	1.00	44.08	0.1255	138.8532	0.018513	3.3068	0.003659	52.89562	6.611952
02-25-2015 01	114	0	1075.6	0.4660	501.2	2.0502	2205.2	110.4	1.00	42.85	0.1255	134,9878	0.017998	3,3068	0.003557	51.42311	6.427888
02-25-2015 02	146	0	1384.8	0.4310	596.8	2.0333	2815.7	142.1	1.00	55.17	0.1255	173.7924	0.023172	3.3068	0.004579	66.20558	8.275697
02-25-2015 03	170	0	1598.4	0.4540	725.7	2.0162	3222.7	164.0	1.00	63.68	0.1255	200.5992	0.026746	3.3068	0.005286	76.41753	9.552191
02-25-2015 04	170		1591.6	0.4520	719.4	2.0172	3210.5	163.3	1.00	63.41	0.1255	199.7458	0.026632	3.3068	0.005263	76.09243	9.511554
02-25-2015 05	168	0	1561.8	0.4220	701.3	1.9185	3188.1	170.5	1.00	66.21	0.1255	208.5559	0.027807	3.3068	0.005495	79.44861	9.931076
02-25-2015 06	169	0	1664.7	0.4320	719.2	1.9334	3218.5	170.8	1.00	66.32	0.1255	208.9199	0.027856	3.3068	0.005505	79.58725	9.948406
02-25-2015 07	169	0	1661.8	0.4330	719.6	1.9356	3216.5	170.5	1.00	66.21	0.1255	208.5559	0.027807	3.3068	0.005495	79.44861	9.931076
02-25-2015 08	170	0	1619.8	0.4390	711.1	1.9939	3229.8	166.2	1.00	64.53	0.1255	203.2849	0.027104	3.3068	0.005356	77.44064	9.68008
02-25-2015 09	170	0	1654.4	0.4300	711.4	1.9313	3195.1	169.7	1.00	65.91	0.1255	207.6272	0.027683	3.3068	0.005471	79.09482	9.886853
02-25-2015 10	169	0	1630.6	0.4200	684.9	1.9252	3139.2	167.3	1.00	64.96	0.1255	•••	0.027285	3.3068	0.005392	77.95697	9.744622
02-25-2015 11	171	0	1639.5	0.4260	698.4	1.9088	3129.5	168.2	1.00	65.32	0.1255	• •	0.027434	3.3068	0.005421	78.38247	9.797809
02-25-2015 12	170	0	1651.8	0.4210	695.4	1.8961	3132.0	169.5	1.00	65.81	0.1255	• •	0.02764	3.3068	0.005462	78.97052	9.871315
02-25-2015 13	171	0	1646.4	0.4190	8.689	1.8904	3112.3	168.9	1.00	65.29	0.1255	•	0.027549	3,3068	0.005444	78.71235	9.839044
02-25-2015 14	169	0	1630.3	0.4180	681.5	1.8843	3071.9	167.3	1.00	64.95	0.1255		0.02728	3.3068	0.005391	77.94263	9.742829
02-25-2015 15	155	0	1504.4	0.4500	631.8	1.8788	2826.5	154.4	1.00	59.94	0.1255	٠.	0.025173	3,3068	0.004975	71.92351	8.990438
02-25-2015 16	160	0	1573.9	0.4060	639.0	1.8517	2914.4	161.5	1.00	62.71		٠.	0.026336	3.3068	0.005205	75.24622	9.405777
02-25-2015 17	165	0	1606.1	0.4060	652.1	1.8917	3038.2	164.8	1.00	63.99		• •	0.026875	3.3068	0.005311	76.78566	9.598207
02-25-2015 18	165	0	1600.8	0.4240	678.7	1.8936	3031.2	164.2	1.00	63.78			0.026786	3.3068	0.005293	76.53227	9.566534
02-25-2015 19	166	9	1715.6	0.4300	737.7	1.9003	3260.1	176.0	1.00	68.35		•	0.028707	3,3068	0.005673	82.02072	10.25259
02-25-2015 20	169	28	1944.4	0.4840	941.1	1.9631	3817.1	199.5	1.00	77.47	0.1255	•••	0.032536	3.3068	0.00643	92.95936	11.61992
02-25-2015 21	171	77	2328.4	0.4130	961.6	2.0263	4718.1	238.9	1.00	92.76			0.038961	3.3068	0.007699	111.3179	13.91474
02-25-2015 22	171	84	2426.3	0.4760	1154.9	2.1013	5098.5	248.9	1.00			•,	0.040599	3.3068	0.008023	115.9984	14.4998
02-25-2015 23	171	86	2408.1	0.4670	1124.6	2.1366	5145.1	247.1	1.00			,	0.040295	3.3068	0.007963	115.1283	14.39104
02-26-2015 00	127	86	1974.3	0.5360	1058.2	2.1184	4182.4	202.6				• •	0.033036	3.3068	0.006529	94.38884	11.79861
02-26-2015 01	98	98	1731.4	0.5650	978.2	2.0999	3635.8	177.6				•	0.028972	3,3068	0.005725	82.7761	10.34701
02-26-2015 02	135	86		0.5030	1043.6	2.1150	4388.0	212.9	1.00		0.1255	260.3749	0.034716	3.3068	0.006861	99.18884	12.39861
	160	98		0.4950	1124.7	2.1157	4807.4	.,	1.00			٠.	0.038021	3,3068	0.007514	108.6311	13.57888
02-26-2015 04	154	98		0.5010	1113.5	2.1150	4700.5		1.00			И	0.037189	3.3068	0.007349	106.255	13.28187
02-26-2015 05	151	98	2200.9	0.4910	1080.6	2.1049	4632.7	225.8	1.00				0.036828	3.3068	0.007278	105.2223	13.15279
02-26-2015 06	166	87		0.4870	1138.2	2.1041	4917.8	239.8	1.00				0.039109	3.3068	0.007729	111./386	13.96/33
02-26-2015 07	163	87		0.4870	1121.7	2.0981	4832.3	236.3	1.00				0.03854	3.3068	0.007516	110.1131	13.75414
02-26-2015 08	163	87		0.4520	1040.1	2.1046	4843.2	236.1	1.00				0.038506	3,3058	U.00/b1	110.01/2	13.73213
02-26-2015 09	166	84		0.4380	1022.2	2.0935	4886.0	239.5	1.00				0.039053	3.3068	0.00702	111.5809	13.94/b1
02-26-2015 10	169	82		0.4420	1043.3	2.0960	4947.7	242.2	1.00			N	_	3.3058	0.007806	112.8526	14.1005/
02-26-2015 11	171	86		0.4690	1123.2	2.1094	5051.8		1.00				_	3.3068	0.00/919	114.4972	CT715.41
02-26-2015 12	169	87		0.4860	1148.1	2.1057	4974.4		1.00			•	0.039529	3.3058	0.007612	0005.211	14.11.33
02-26-2015 13	169	88		0.4670	1102.3	2.0977	4951.4		1.00				0.039497	3.3058	508/00.0	217.4077	14.10395
02-26-2015 14	169	87		0.4870	1156.1	2.0880	4956.8		1.00				0.039723	3.3068	0.00785	113.4932	14.18000
	169	87	_	0.5010	1173.7	2.0696	4848.6		1.00				0.039202	3.3058	0.007/47	112.0064	14.0008
	169	88	2350.7	0.4890	1149.5	2.0774	4883.4		1.00			•	0.038334	3.3068	6///DO:U	112.3041	14.04001
	169	88	2346.8	0.5000	1173.4	2.0884	4901.0		9.1	93.50	0.1255	294.5234	0.039269	0.0000	0.007777	114.15/0	13 04527
02-26-2015 18	166	8	2333.6	0.5040	1176.1	2.06/8	4825.4	739.4	J. 1			-	0.0000	2000		777	1

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

Date/Hour	YT01 Gross Load MW Value	YT02 Gross Load MW Value	Common Stack Common Stack Common Stack Heat Input NOx Lb/mmBtu NOx Lb/mmBtu	Common Stack C	Sommon Stack NOx La/Hr	Common Stack Common Stack Common Stack Unit Operation SO2 SO2 (Lb/Hr) CO2 (Tors/Hr) (minutes)	ommon Stack C	ommon Stack U		Coal tons/hr	PM-10 (lb/mmBtu)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (lb/TBtu)	Mercury HCI (lb/hr)		HF (tb/hr)
02-26-2015 19	166	88	2330.0	0.5020	1169.7	2.0623	4805.2	239.1	1.00	92.83	0.1255	292.415	0.038988	_		111.3944	13.9243
	167	8 88	2327.6	0.5020	1168.5	2.0704	4819.1	238.8	1.00	92.73	0.1255	292.1138	0.038948	_	769700.0	111.2797	13.90996
	167	88	2331.5	0.5030	1172.7	2.0797	4848.9	239.7	1.00	92.89	0.1255	292.6033	0.039013		0.00771	111.4661	13.93327
02-26-2015 22	166	88	2334.1	0.4970	1160.0	2.0778	4849.9	239.5	9 5	92.99	0.1255	292.9296	0.039057	3.3068	0.007718	111.5904	13.9488
	154	8 8	0./022	0.5080	11741	2.0857	4605.4	7215	9 6	86.02	0.1255	270.9796	0.03613		0.00714	103.2287	12,90359
02-27-2015 00	146	8 8		0.5120	1096.2	2.0819	4457.5	219.7	8 8	85.30	0.1255	268.7081	0.035827	3.3068	0.00708	102.3633	12.79542
	162	8 8		0.4970	1143.1	2.0855	4796.6	236.0	1.00	91.63	0.1255	288.65	0.038486	3.3068 (0.007606	109.9602	13.74502
	166	88		0.4970	1163.2	2.0878	4886.2	240.1	1.00	93.24	0.1255	293.7202	0.039162	_	0.007739	111.8916	13.98645
02-27-2015 04	163	88	2294.8	0.5080	1165.8	2.0890	4793.8	235.4	1.00	91.43	0.1255	287.9974	0.038399	_	0.007588	109.7116	13.71394
02-27-2015 05	165	87	2281.2	0.5120	1168.0	2.1048	4801.4	234.1	1.00	90.88	0.1255	286.2906	0.038171	_	0.007543	109.0614	13.63267
02-27-2015 06	168	88		0.5070	1190.0	2.0991	4926.8	240.8	1.00	93.51	0.1255	294.5611	0.039274	_	0.007761	112.212	14.02649
	169	88		0.5100	1194.2	2.1046	4928.1	240.2	1.00	93.29	0.1255	293.8708	0.039182	_	0.007743	111.949	13.99363
	168	88		0.5090	1192.6	2.1001	4920.5	240.4	1.00	93.35	0.1255	294,0465	0.039206	_	0.007748	6510.711	14,00139
	168	88	2357.6	0.5010	1181.2	2.0986	4947.7	241.9	0.1	93.93	0.1255	292.8788	0.03945		0.007700	111.7139	12,002,4
	168	88	2328.9	0.5050	1176.1	2.1228	4943.7	238.9	1.00	97.78	0.1255	1/7:767	76850.0	3.3058	107/000	111.3410	13.317.73
	165	88	2300.5	0.5060	1164.1	2.1263	4891.5	236.0	1.00	91.65	0.1255	227 / 227	0.050494		0.007000	105.504	13.74601
	155			0.5150	1138.9	2.1189	4685.7	226.9	9 6	00.10 00.20	257.0	782 4754	0.037669		0.007.323	107.608	13.451
	161	82 6		0.4960	1116.4	2.1315	2,127,4	250.9	0.1	02.00	0.1255	275 2465	0.037600	3068	2572000	104.8542	13.10677
	25.5	8 8	2193.2	0.4980	7.7501	2,1172	4027.4	225.0	3 6	87.66	0.1255	776.1377	0.036818	3.3068	0.007276	105.1936	13.1492
02-27-2015 15	55			0.4300	1097.2	2.1264	4685.1	226.1	8 8	87.78	0.1255	276.5142	0.036868	3.3068	0.007286	105.3371	13.16713
	<u> </u>			0.4840	1090.5	2.1179	4771.7	231.2	1.00	89.76	0.1255	282.7515	0.0377	3.3068	0.00745	107.7131	13.46414
	166			0.4620	1062.8	2.1276	4894.3	236.0	1.00	91.65	0.1255	288.7002	0.038493	3.3068	0.007607	109.9793	13.74741
02-27-2015 19	168			0.4460	1034.7	2.1281	4937.0	238.0	1.00	92.43	0.1255	291.1475	0.038819	3.3068	0.007671	110.9116	13.86394
02-27-2015 20	169		2344.9	0.4660	1092.7	2.1032	4931.8	240.6	1.00	93.42	0.1255	294.285	0.039237	3,3068	0.007754	112.1068	14.01335
02-27-2015 21	169		2348.1	0.4930	1157.6	2.0976	4925.3	240.9	1.00	93.55	0.1255	294,6866	0.039291	3.3068	0.007765	112.2598	14,03247
02-27-2015 22	167		2331.5	0.4930	1149.4	2.0985	4892.7	239.2	1.00	92.89	0.1255	292.6033	0.039013	3.3068	0.00771	111.4661	13.93327
02-27-2015 23	169		2311.3	0.5030	1162.6	2.1231	4907.1	237.1	1.00	92.08	0.1255	290.0682	0.038675	3.3068	0.007643	110.5004	13.81255
02-28-2015 00	115		1872.7	0.5880	1101.1	2.0916	3916.9	192.1	1.00	74.61	0.1255	235.0239	0.031336	3.3068	0.006193	89.53147	11.19143
02-28-2015 01	66	88		0.6070	1054.1	2.0798	3611.5	178.2	1.00	69.18	0.1255	217.9308	0.029057	3,3068	0.005742	83.01992	10.37749
02-28-2015 02	114			0.5810	1099.6	2.0630	3904.5	194.2	1.00	75.40	0.1255	237.5213	0.031669	3.3068	0.006258	90.48287	11.31036
02-28-2015 03	147			0.5210	1139.5	2.0742	4536.5	224,4	1.00	87.14	0.1255	274.4811	0.036597	3.3068	0.007232	104.5625	13.07032
	162			0.5080	1169.5	2.0757	4778.4	236.2	00.1	91.72	0.1255	288.9136	0.038521	3.3068	519/00.0	100.050	13./5/5/
02-28-2015 05	163			0.5050	1141.0	2.0781	4695.5	231.8	9 6	90.02	0.1255	207.207.2	0.03780.0	3 3068	0.00757	109 439	13 67988
	164		1.682.2	0.4950	1133.1	06/0/7	4767.5	5.452 7.17.0	9 5	93.74	0.1255	295,2764	0.03937	3,3068	0.00778	112.4845	14.06056
02-28-2015 U/		òò		0.4500	11867	2.0203	4831.5	242.1	100	94.00	0.1255	296.0922	0.039478	3.3068	0.007802	112.7952	14,0994
	170		_	0.5010	1179.3	2.0537	4834.0	241.5	1.00	93.78	0.1255	295.4019	0.039386	3.3068	0.007783	112.5323	14.06653
	170			0.5050	1184.5	2.0479	4803.4	240.6	1.00	93.45	0.1255	294.3603	0.039247	3.3068	0.007756	112.1355	14.01693
	170		2354.0	0.5000	1177.0	2.0248	4766.4	241.5	1.00	93.78	0.1255	295.427	0.03939	3.3068	0.007784	112.5418	14.06773
02-28-2015 12	158	87	2238.1	0.5150	1152.6	2.0161	4512.3	229.6	1.00	89.17	0.1255	280.8816	0.03745	3,3068	0.007401	107,0008	13.3751
02-28-2015 13	151	. 87	2171.8	0.5130	1114.1	2.0116	4368.8	222.8	7.00	86.53	0.1255	272.5609	0.036341	3.3068	0.007182	103.8311	12.97888
02-28-2015 14	152	87	2183.7	0.4990	1089.7	2.0036	4375.3	224.1	1.00	87.00	0.1255	274.0544	0.03654	3.3068	0.007221	104.4	13.05
02-28-2015 15	139			0.5190	1086.2	1.9990	4183.6	214.7	1.00	83.38	0.1255	262.6464	0.035019	3.3068	0.00692	100.0542	12.50677
				0.5000	1128.0	2.0093	4533.0	231.5	1.00	89.88	0.1255	283.128	0.03775	3.3068	0.00746	107.8566	13.48207
02-28-2015 17	153	87	2205.4	0.5010	1104.9	1.9901	4388.9	226.3	1.00	87.86	0.1255	276.7777	0.036903	3.3068	0.00/293	105.4375	13.1/968

Date/Hour	YT01 Gross Load MW Value	YT02 Gross Common Stack Load MW Heat Input Value (mmBtu)	Sommon Slack Heat Input (mmBtu)	Common Stack Common Stack NOx Lb/mr	Common Slack O	mon Slack Common Stack Common Stack Unit Operation SC Soz (LbHr) Common Stack (Common Stack Unit Operation SC Common Stack Unit Operation SC C Common Stack Unit Operation SC C C C C C C C C C C C C C C C C C C	ommon Stack SO2 (Lb/Hr)	Common Stack CO2 (Tons/Hr)		Coal washr	PM-10 (lb/mmBW)	PM-10 (Lb/Hr)	Lead (lb/hr)	Mercury (Ib/TBtu)	Mercury (lb/hr)	нсі (Івіпі)	HF (lb/hr)
02-28-2015 18	163	87	2272.3	0.5030	1143.0	1.9929	4528.4	233.1	1.00	90.53	0.1255	285.1737	0.038023	3.3068		108.6359	13.57948
02-28-2015 19	164	87	2286.9	0.5060	1157.2	1.9883	4547.1	234.6	1.00	91.11	0.1255	287.006	0.038267	_		109.3339	13.66673
02-28-2015 20	164	86	2313.3	0.5080	1175.2	1.9786	4577.1	237.3	1.00	92.16	0.1255	290.3192	0.038709		0.00765	110.596	13.8245
	164	87	2321.3	0.5070	1176.9	1.9763	4587.6	238.2	1.00	92.48	0.1255	291.3232	0.038842	_		110.9785	13.87231
02-28-2015 22	164	98	2312.3	0.5100	1179.3	1.9741	4564.6	237.2	1.00	92.12	0.1255	290.1937	0.038692	_		110.5482	15.81855
	164	98	2303.3	0.5090	1172.4	1.9744	4547.6	236.3	1.00	91.76	0.1255	289.0642	0.038541		0.007616	6/11.011	13./64/4
	140	87	2105.0	0.5210	1096.7	1.9639	4134.0	216.0	1.00	83.86	0.1255	264.1775	0.035223	3.3068		108 545	12.57.908
	158	86	2270.4	0.5070	1151.1	1.9691	44/0./	232.9	1.00	90.45	0.1255	264.9352	U.U3/591	_	900/000	U40.041	CT00C.C.
	157	87	2237.9	0.5140	1150.3	1.9721	4413.4	229.6	00.1	89.Tb	0.1255	280.8362	0.03/44/	3.2068	0.0074	108.6454	13.57.55
	57	2 ≪	5.7/77	0.5180	11//.2	1.9619	400770	23.2	8 6	90.54 7. 7.	0.1255	260.1300	0.05000 0.05000		0.000,310	25.578	12.40697
03-01-2015 04	141	χ · 6	20/6.1	0.000	1100.1	1 9844	4077.6	2413	9 5	89.81	0.1255	282,9147	0.037721	_	0.007454	107.7753	13.47191
	153	90 6	2,452	0.4320	1115.1	1.9643	4497.9	234.9	8 8	91.23	0.1255	287,3699	0.038315		0.007572	109.4725	13.68406
	160	87	2278.8	0.4970	1132.6	1.9552	4455.5	233.8	1.00	90.79	0.1255	285.9894	0.038131	_	0.007535	108.9466	13.61833
	164	87	2290.9	0.5030	1152.3	1.9568	4482.9	235.0	1.00	91.27	0.1255	287.508	0.038334	3.3068	0.007575		13.69064
	164	87	2285.2	0.5020	1147.2	1.9607	4480.6	234.5	1.00	91.04	0.1255	286.7926	0.038238	_	0.007557		13.65657
	160	88	2279.4	0.4910	1119.2	1.9458	4435.2	233.9	1.00	90.81	0.1255	286.0647	0.038141	3.3068	0.007537	108.9753	13.62191
03-01-2015 11	164	87	2299.8	0.4930	1133.8	1.9567	4500.0	236.0	1.00	91.63	0.1255	288.6249	0.038483	_	0.007605	109.9506	13.74382
03-01-2015 12	164	87	2299.1	0.4950	1138.1	1.9650	4517.7	235.9	1.00	91.60	0.1255	288.5371	0.038471	_	0.007603	109.9171	13.73964
03-01-2015 13	164	87	2300.5	0.4970	1143.3	1.9676	4526.4	236.0	1.00	91.65	0.1255	288.7128	0.038494	3.3068	0.007607	109.9841	13.74801
03-01-2015 14	164	87	2303.1	0.4970	1144.6	1.9667	4529.4	236.3	1.00	91.76	0.1255	289.0391	0.038538	3.3068	0.007616	110.1084	13.76355
03-01-2015 15	164	87	2315.1	0.4980	1152.9	1.9499	4514.3	237.5	1.00	92.24	0.1255	290.5451	0.038739	3.3068	0.007656	110.6821	13.83526
03-01-2015 16	164	87	2311.4	0.5010	1158.0	1.9531	4514.5	237.2	1.00	92.09	0.1255	290.0807	0.038677	3.3068	0.007643	110.5052	13.81315
03-01-2015 17	164	87	2307.5	0.5060	1167.6	1.9467	4492.1	236.8	1.00	91.93	0.1255	289.5913	0.038612	3.3068	0.00763	110.3187	13.78984
03-01-2015 18	164	87	2307.4	0.5050	1165.2	1.9319	4457.7	236.7	1.00	91.93	0.1255	289.5787	0.03861	3.3068	0.00763	110.3139	13.78924
	164	87	2309.4	0.5210	1203.2	1.9321	4462.1	236.9	1.00	92.01	0.1255	289.8297	0.038643	3.3068	0.007637	110.4096	13.8012
03-01-2015 20	163	87	2273.5	0.5080	1154.9	1.9329	4394.5	233.3	1.00	90.58	0.1255	285.3243	0.038043	3.3068	0.007518	108.6932	13.58665
03-01-2015 21	164	87	2294.6	0.4920	1128.9	1.9393	4450.0		1.00	91.42	0.1255	287.9723	0.038396	3.3068	0.007588	109.702	13.71275
03-01-2015 22	162	87	2286.2	0.4980	1138.5	1.9311	4414.9		1.00	91.08	0.1255	286.9181	0.038255	3.3068	0.00756	109.3004	13.66255
03-01-2015 23	127	87	1990.6	0.5360	1067.0	1.9333	3848.5		1.00	79.31	0.1255	249.8203	0.033309	3.3068	0.006582	95.16813	11.89602
03-02-2015 00	98	87	1729.1	0.5350	925.1	1.9303	3337.7	177.4	1.00	68.89	0.1255		0.028933	3.3068	0.005/18	82.55514	10.3332/
	86	87	1737.2	0.5210	905.1	1.9449	3378.7		1.00	69.21	0.1255	~	0.029069	3.3068	0.005745	83.05339	10.3816/
	86	87	1732.0	0.5160	893.7	1.95/3	3390.0		1.00	9.60	0.1255	217.340	0.00000	90000	0.000725	97,000,000	10.5500
03-02-2015 03	8 8	2 6	1/54.2	0.51/0	896.6	4 0470	3386.7	E / / I	9.6	70.83	0.1255		0.023010	3306.6	0.00033	84 39203	10.549
	100	97	1816 5	0.3030	8719	1 9761	3589.5		001	72.37	0.1255	227.9708	0.030396	3.3068	0.006007	86.84462	10.85558
	122	. i	1943.0	0.4870	946.2	1.9906	3867.7		1.00	77.41	0.1255	243.8465	0.032512	3.3068	0.006425	92.89243	11.61155
	152	87	2200.6	0.5170	1137.7	1.9834	4364.6	225.8	1.00	87.67	0.1255		0.036823	3.3068	0.007277	105.208	13.151
03-02-2015 08	166	87	2328.7	0.5140	1197.0	1.9887	4631.2		1.00	92.78	0.1255	• •	0.038966	3.3068	0.0077	111.3323	13.91653
03-02-2015 09	166	87	2329.9	0.5040	1174.3	1.9880	4631.8		1.00	92.82	0.1255		0.038986	3.3068	0.007704	111.3896	13.92371
03-02-2015 10	146	87	2133.8	0.5140	1096.8	1.9940	4254.7	•	1.00	85.01	0.1255	267.7919	0.035705	3.3068	0.007056	102.0143	12.75179
03-02-2015 11	113	87	1846.2	0.5430	1002.5	1.9817	3658.6		1.00	73.55	0.1255	231.6981	0.030893	3.3068	0.006105	88.26454	11.03307
03-02-2015 12	86	87	1736.4	0.5050	876.9	1.9708	3422.1		1.00	69.18	0.1255	217.9182	0.029055	3.3068	0.005742	83.01514	10.37689
03-02-2015 13	86	87	1740.0	0.5170	9'668	1.9677	3423.8		1.00	69.32	0.1255	218.37	0.029116	3.3068	0.005754	83.18725	10.39841
	88	87	1722.4	0.5380	926.7	1.9707	3394.4	•	1.00	68.62	0.1255	216,1612	0.028821	3.3068	0.005696	82.34582	10.29323
	86	87	1717.7	0.5440	934.4	1.9637	3373.1		1.00	68.43	0.1255		0.028742	3.3068	0.00568	82.12112	10.26514
03-02-2015 16	86	87	1726.6	0.5500	949.6	1.9507	3368.0	177.2	1.00	68.79	0.1255	216.6883	0.028891	3.3068	0.005709	82.54661	10.31833

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

	_															_	_	_																					0	0	0	0	0	0	0	_
HF (lb/hr)		10.33267	10.19223	10.31534	11 48068	11 71375	11.60737	10.86932	10.32131	10.32072	8.726892	3.663944	0.247566	-	0 (Э (.	o (-	9 (- (.	> c	.	> 0	.	> C	- •	- •	- •		,	, с					, 0	U						Ü	J
HCI (lb/hr)		82.66135	81.53785	82.52271	84.28207	24040.40	92.85896	86.95458	82.57052	82.56574	69.81514	29.31155	1.980526	Э,	0	0 (5	5	- ·	5 (>	>	o c	-	.	> 0	.	> (5 (> (5 6	5 6	5 C		0 0	•			0	0	0	0	0	0	0	0
Mercury	Cuan)	0.005717	0.00564	0.005708	0.00583	555555	0.006423	0.006014	0.005711	0.005711	0.004829	0.002027	0.000137	0	0 '	0 (0 (-	-	0 (5 (> 0	> 0	> 6	> 6	-	o 0	-)	-	9	- 0		o c	0 0	0 0		. 0	0	0	0	0	0	0	0	0
Mercury		3,3068	3,3068	3.3068	3.3068	2000	3,3068	3,3068	3,3068	3.3068	3.3068	3.3068	3.3068	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000		0000	00000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Lead (lb/hr)		0.028931	0.028538	0.028883	0.029499	0027500	0.032501	0.030434	0.0289	0.028898	0.024435	0.010259	0.000693	D	0	0	0	0	0 '	0 (> •	5 6	> 0	> 0	.	- (.	5 (0 (Э (0 (5 6	> 0	o c	.	o c		0 0	0	0	0	0	0	0	0	0
PM-10	_	216.9895	214.0403	216.6256	221.244	1050.142	243.7587	228.2594	216.7511	216.7385	183.2677	76.94405	5.198963	0	0	0	0	0	0	0 1	5 (0 (>	0 0	5 (- 0	9 0	5 (0 (Э (0 0	5 (-	> c		0 0						0	0	0	0	0
PM-10	(б/яшвеца)	0.1255	0.1255	0.1255	0.1255	0.135	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1253	0.1233	0.1255	771.0	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
		68.88	67.95	68.77	70.24	† 6	77.38	72.46	68.81	68.80	58.18	24.43	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	9 6	8 6	8 6	000	000	0.00	0.00	0.00	0.0	0.00	0.00	0.00
nt Operation	(Salunies)	1.00	1.00	1.00	00.5	9 6	9 6	100	1.00	1.00	1.00	1.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.0	0.00	9 6	0.00	9 6	888	000	000	0:00	0.00	0.0	0.00	0.00	0.00
Common Stack Common Stack Unit Operation Cost tonshir Stack	2Z (Tons/Hr)	177.4	175.0	177.1	180.9	19/57	1.102	186.6	177.2	177.2	149.8	67.9	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	9 6	9 6	o c	3 6	0.0	0.0	0:0	0.0	0.0	0.0
mmon Stack Co	OZ (Lb/Hr) CO	3366.7	3343.8	3376.2	3474.8	3815.0	38709	3620.2	3427.8	3436.6	2655.2	991.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	0.0	9 6	ò	9 6	3 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0
mmon Stack Co	Lh/mmBru) S	1.9472	1.9606	1.9560	1.9711	1.9862	19929	1,9904	1.9847	1.9899	1.8183	1.6178	1.6179	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0000	00000	0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000
mmon Stack Co	NOX LEVHr (947.5	939.7	932.1	932.6	1015.3	1074.1	1014.9	939.5	880.8	871.8	272.8	42.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	9 6	9 6	9 0	0	0.0	0.0	0:0	0.0
Common Stack Common Stack	NOx Lb/mmBtu	0.5480	0.5510	0.5400	0.5290	0.5290	0.5480	0.5580	0.5440	0.5100	0.5970	0.4450	0.9931	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	00000	0000	0000	00000	0.0000	0.0000	0.0000	0.0000
Common Stack Co	ON (mmBtm)	1729.0	1705.5	1726.1	1762.9	1921.1	1960.1	1818.8	1727.1	1727.0	1460.3	613.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0:0	0.0	9 6	9 6	9 6	3 6	8 6		0.0	0.0	0.0	0.0
YT02 Gross Col	Section	87	87	88	87	87	» 6	6 6	8	87	9	0	1	0	0	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0	o .	0 (5 (0 (.	5 C	5 C	o c	o C	· c	. 0	0	0	
YT01 Gross Y		86	86	88	104	122	125	5 5	6	86	95	55	⊣	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	- (> c	.	0 0	o c) C		0	0	0
Date/Hour		03-02-2015 17	03-02-2015 18	03-02-2015 19			03-02-2015 22	03-702-2015 23			03-03-2015 03	03-03-2015 04	03-03-2015 05	03-03-2015 06	03-03-2015 07	03-03-2015 08	03-03-2015 09	03-03-2015 10	03-03-2015 11	03-03-2015 12	03-03-2015 13	03-03-2015 14	03-03-2015 15	03-03-2015 16			03-03-2015 19	03-03-2015 20	03-03-2015 21	03-03-2015 22	03-03-2015 23						03-04-2012 03	03-04-2015-06	05-04-2015 07	03-04-2015 08	03-04-2012 03	03-04-2015 11	03-04-2015 12	03-04-2015 13		03-04-2015 15

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)		0	0	0	- 0	0	0	0	0	0	0 (-	5 C		0	0	0	0	0	0	0	0	0	0	0 (>	>	.		. 0	0	0	0	0	0 (0 (, (-	, _	, .		J
HCI (lb/hr)		0	0	0 (0	0	0	0	0	0	0	0 (> 0	0 0	0	0	0	0	0	0	0	0	0	0	0 (- 0	- (5 0	o c		0	D	0	0	0	0 (-	> 0	5 C	0 0	9 0	0		. 0
Mercury	— (man)	0	0	0 '	9 0	0	0	0	0	0	0	0 0	.	0 0		0	0	0	0	0	0	0	0	0	0 1	- •	-	5 C		0	0	0	0	0	0	0 1	o '	-	o 0	O	0 0	0		0
Mercury		0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	00000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	00000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0,000	0000	0.0000	0.000	0.0000
Lead (lb/hr)		0	0	0	5 6	0	0	0	0	0	0	0 (5 6	,	· c	0	0	0	0	0	0	0	0	0	0 (-	- •	5 0	5 C	0 0	0	0	0	0	0	0 1	- ·	- 0	-	9 0	o c	0 0		0
PM-10	(LMAT)	0	0	0	o c	0	0	0	0	0	0	0 (0 0	o c	• =	0	0	0	0	0	0	0	0	0	0	0 '	-	D (5 6	o c	0	0	0	0	0	0	0	0 (.	5 0	o c	0	• =	, 0
PM-10	11	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1755	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	*	0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 6	9.0	60.0	0.00
it Operation C	(minutes)	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	0.00	00'0	0.00	0.00	0.00	0.0	0.00	0.00	9 6	8 8	6	0.00
Common Stack Common Stack Unit Operation	2 (Tons/Hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	8 8
nmon Stack Co	22 (Lb/Hr) CC	0.0	0:0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	0.0
Common Stack Co	Ē	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000
	OX LB/Hr OX	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	3 6	2 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	2 6	3 6	0.0
Common Stack Common Stack	Lb/mmBtu NG	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	00000	0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.000.0	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.0000
Common Stack Com	MBED)	0:0	0.0	0.0	0.0	3 6	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	9 6	9 6	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	3 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	8 0:
		0	0	0	00	o c	, 0	0	0	0	0	0	0	0 (5 6	o c	, 0	. 0		0	0	0	0	o	0	0	0	0	0	0 0	.	. 0	0	0	0	0	D	0	0	ο.	0 (0 0	> 0	
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- 1	Value	16	17	18	91.5	3 5	22	73	8	01	02	03	ষ	05	8 8	ò 8	8 2	3 8	1 1	12	13	14	15	16	17	18	13	20	77	22	7 8	3 5	70	03	45	05	90	07			ខ្ល	# 5	7 ;	5 4
Control	Caternour	03-04-2015 1		03-04-2015 1		03-04-2015 2				03-05-2015 0	03-05-2015 (03-03-2015			03-05-2015		03-05-2015 13	03-05-2015	03-05-2015	03-05-2015	03-05-2015	03-05-2015	03-05-2015	03-05-2015		03-05-2015	03-02-50-60	03-06-2015	03-06-2015	03-06-2015	03-06-2015	03-06-2015	03-06-2015				03-06-2015	03-06-2015 11		03-06-2015

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	HF (lb/hr)	J	_				_	_	_	_	-	_	- '	- '	- '	- `	. •	-		-	•	•		- •	- '	- '	- '	_																			
	HCI (Bryl)	0	0	0	0 0		0	0	0	0	0	0	0 (o (- •	- ·	0 0	.	9 6	0 0			9 (> (9 (0 (0	0	0	0	0	0	0 '	o •	5 (- (5 (-)	.				.			5
	(lb/hr)	0	0	0	0 0	0	0	0	0	0	0	0	۰ ۵	- (- '	5 (-	o c	.	o c		-	-)	э (0	0	0	0	0	0	0	0 (э (- (-	5 (o ()	o 6	.	-		-			د
F	Mercury M (Ib/TBtu) (0.0000	0.000.0	0.000.0	0.0000	0.000	0.0000	0.000.0	0.000.0	0.0000	0.000.0	0.0000	0.0000	0.0000	0.000	0.0000	0.000	00000	0.000	0000	0000	0.000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.000	0.000
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	Lead (lb/hr)	0	0	0	0 0	9 6		0	•	0	O	O			,	. د	, ,	, (,	, .	, .	, ,		,			0	_	_	_														-			-
	PM-10 (Lb/Hŋ	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	o '	0 (> (- 0	- 0			- 6	- (0 (0	0	0	0	0	0	0	0	0	0	o (- '	0 (0 (0 0	> (>	5 6	5 (5 C	> 0	5
	PM-10 (Ib/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1233	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1235	0.1255
:	Coal tons/hr	0.00	0.00	0.00	0 0	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	3 6	0.00	00.0	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	00'0	0.00	00.0	000	0.00	00:0	0.00
		0.00	0.00	0.00	0.0	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
	mmon Stack Un 2 (Tons/Hr)	0:0	0.0	0.0	0 6	2 6	8 00	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	0.0	2 6	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	mmon Stack Co	0:0	0.0	0.0	0.0	3 6	9 0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10000	Common Stack Common Stack Common Stack Unit Operation S02 (Lb/Hr) C02 (Tons/Hr) (minutes)	0.0000	0.000	0.0000	0.0000	00000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	mon Stack 3x Lb/Hr	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Common Stack Common Stack Com Heat Input NOx Lb/mmBtv NC	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	leat Input (Complete)	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- 1^	Y 102 Grass Cor Load MW H	0	0	0	0 0	.		0	0	0	0	0	0	0	0	0	0	0 '	0	o (o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o (0	0
-	YTOT Gross YTE Load MW Lo Value	0	0	0	0 (.	0	0	0	0	0	0	0	0	0	0	0	0 '	0	0 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o ·	0	0		0 -	0
	DeterHour Los	03-06-2015 15		03-06-2015 17		03-06-2015 19	03-06-2015 20				03-07-2015 01	03-07-2015 02		03-07-2015 04											03-07-2015 15	03-07-2015 16	03-07-2015 17	03-07-2015 18	03-07-2015 19	03-07-2015 20	03-07-2015 21	03-07-2015 22	03-07-2015 23	03-08-2015 00													03-08-2015 13

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (Ib/hr)		0	0	0 (90	. 0	0	0	0	0	0	0	0 0	o c				. 0	. 0	0	0	0	0	0	0	o ·	0	0	0	0			,		, .	00	, .	, .	J	٥	·	٥	Ü	Ü	
HCI (lb/hr) HF (lb/hr)	3	0	0	0 (9 0	0	0	0	0	0	0	0	0 0	5 6	5 C	o c	, 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 '	5 6	9 (o c	0 0	o c	o c		0	0	0	0	0	0	0
Mercury (Ib/frr)	-	0	0	0 (0 0		0	0	0	0	0	0	0 (-		s c	o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (9 (o c					0	0	0	0	0	0	0
Mercury (lb/TBtu)	÷	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0000	0.000	0000	00000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Lead (lb/hr)	:	0	0	0 (o c		0	0	0	0	0	0	0 0	5 6	-	5 C	, c	0		0	0	0	0	0	0	0	0	0	0	0	0	0 (5 (> 0	0 (> C	o c			0	0	0	0	0	0
PM-10 (Lb/Hr)	-	0	0	0	0 0		0	0	0	0	0	0	0 (5	5 6	.				0	0	0	0	0	0	0	0	0	0	0	0	0 (5 (> 6		5 6		· c		0	0	0	0	0	0
PM-10 (lb/mmBtu)	.	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1233	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1233	0.1255	0.1055	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	<u>=</u> 	0.00	0.00	0.00	0.00	800	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	00.0	8 6	8 6	800	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	0.00	0.00	3 6	8 8	000	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.0	8 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 6	8 6	8 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	0.00	00.0	8 8	8 6	000	0.00	0.0	0.00	0.00	0.00	0.00
Tman Stack Uni	.	0.0	0.0	0:0	0.0	9 0	0.0	0.0	0.0	0.0	0:0	0.0	0.5	0.0	0.0	9 6	3 6	3 6	2 0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0 0	0.0	000	9 6	9 0		00	0.0	0.0	0.0	0.0	0.0
SOZ SOZ (Lbhr) Coz (Tons/Hr) (minutes)		0.0	0.0	0.0	0.0	2 5	99	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	3 6	3 6	8 6	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		9.6	0.0	9 6	3 6	200	90	0.0	0.0	0.0	0.0	0.0
S S	_			_		_	_	_	_	_	_	_	_								_	_	_	_	_	_	_	_	_	_		_	_			_ ,							_	_	
Common Stack SO2	(Lo/mms/w)	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000		0000	00000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	00000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		0.0	0.0	0.0	0.0	9 6	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0))	o 6	3 6	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	9 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack NOx Lb/mm8tu	-	0.000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0000	0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
8 2	_	0	0	0	0 0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	9 6	3 6	2 0	0.0	0.0	0.0	o.	0.0	0.0	o.	0:0	o,	0.0	0.0	0.0	o.	0.0		0.0	0.0	9 6	9 6	9 0	. 9	. 9	9	o.	9
Common Stack Heat Input	(m/gww) · ·	0.0	0.0	0.0	0.0	o c	io																																					0	
	Value	0	0	0	0 0	o c		0	0	0	0	0	0	0	0		o c	0 0	0 0		0	0	0	•	0	0	0	0		0	0	0	0	0 (י כ	0 (-	5 C	, c	, ,			0	0	0
SS	Value	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	5 0	-	o c	-		0	0	0	0	0	0	0	0	0	0	0	0	0	o (· •	0 (9 0	00	o c) C	0	0	0	0	0
DaverHour		03-08-2015 14	03-08-2015 15		03-08-2015 17				03-08-2015 22		03-09-2015 00	03-09-2015 01					03-09-2015 08						03-09-2015 13	03-09-2015 14	03-09-2015 15	03-09-2015 16	03-09-2015 17	03-09-2015 18	03-09-2015 19	03-09-2015 20	03-09-2015 21	03-09-2015 22			U3-10-5015 U1	03-10-2015 02	03-10-2015 03	03-10-2015 04	03-10-2015 05	03-10-2015 02			03-10-2015 10	03-10-2015 11	

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	HF (lb/hr)	Ü	Ü		, .	_	J	J	J	_			- `	-				_		_	_																								
	HCI (lb/hr)	0	0	0 (- 0	0	0	0	0	0	0	0 (o (o c		•			0	0	0	0	0	0	0	0		0 (- (-	.	.	, с	. 0	0	0	0	0							,
	Mercury (lb/hr)	0	0	0	- 0	0	0	0	0	0	0	0 (0 0	o c		•		0	0	0	0	0	0	0	0	0	0	0 (0 (9 0	- 6	o c	0 0	0	0	0	0	0	0	0	0	0	0 (0	o
	Mercury Mercury (lb/TBtu) (lb/hr)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	ead (lb/hr)	0	0	0	5 C	0	0	0	0	0	0	0	0 (> c	o 6	>	· c	о с	0	0	0	0	0	0	0	0	0	0 1	0 1	0 (.	o c	0 0	0	0	0	0	0	0	0	0	0	0	0	٥
	PM-10 (Lb/Hr) Lead (lb/hr)	0	0	0	0 0	0	0	0	0	0	0	0	0 (0 0		o c		· c	0	0	0	0	0	0	0	0	0	0	0	0 (.	o c	,	0	0	0	0	0	0	0	0	0	0	0	0
	PM-10 (Ib/mmBw)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1233	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	Coal tons/hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	8 6	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 6	000	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0 0 0 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	8 6	8 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 5	000	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	mmon Stack Ur	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	8 6	9 6	00	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	P. S	0.0	3 6	9 0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0
-	Common Stack Common Stack Unit Operation SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0	0.0	0:0	0 0	2 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	9 6	8 6	00	00	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Jacks comme	SO2 SO2 (Lb/mmBtu)	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	00000	00000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	NOx Lb/Hr	0.0	0.0	0.0	0.0	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	3 6	3 6	9 0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	2 6	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0
	ommon Stack Co	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.000	00000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0,000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000
	Common Stack Heat Input NOx Lb/mmBul NOx Lb/Hr	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	3 6	9 6	3 6	200	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0
- 1	Load MW	0	0	0	0 0	0 0	0 0	0	0	0	0	0	0	0	о ·	9 0	o c	.	o c	o c	0	0	0	0	0	0	0	о	0	0	0	0 (-			0	0	0	0	0	0	0	0	0	0
ŀ	Y 101 Gross Load MW Value	0	0	0	00	o c		0	0	0	0	0	0	0	0	0 (-	- 0	э с	o c	0	0	0	0	0	0	0	0	0	0	0	0 (o 0	o c	o c	. 0	0	0	0	0	0	0	0	0	0
-	Date/Hour	03-10-2015 13		03-10-2015 15	03-10-2015 16	03-10-2015 17	03-10-2015 19	03-10-2015 20	03-10-2015 21	03-10-2015 22	03-10-2015 23	03-11-2015 00					03-11-2015 05		05-11-2015 07				03-11-2015 12	03-11-2015 13	03-11-2015 14	03-11-2015 15	03-11-2015 16	03-11-2015 17	03-11-2015 18			03-11-2015 21		03-11-2015 23				03-12-2015 04	03-12-2015 05	03-12-2015 06	03-12-2015 07	03-12-2015 08	03-12-2015 09	03-12-2015 10	03-12-2015 11

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_		0	0	0	-		0	0	0	0	0	0	0 (- 0	- (5 6	.		0	0	0	0	0	0	0 (0 (o (0 (o (-	0	0	0	0	0	0	0	0 (o (5 C	o c	o c		· -	,
	HF (Ib/hr)																																												
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Martin	(lb/TBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0.000	00000	00000	5
	Lead (lb/hr)	0	0	0	0 0	0	0	0	0	0	0	0	o (0	0 (5	5 C	o c	. 0	0	0	0	0	0	0	0	0	0 (0 (5 6	0	0	0	0						5 6		> 6	> 6	.	,
UL-NG	(LMH)	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0 (5 (-	o c	0	0	0	0	0	0	0	0	0	0 (0 (5 0	0	0	0	0	0	0	0	0 (0 '	5 (> 6	> 6	.	,
	(lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0 1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	527.0	0.1255	0.1255	
-	Coal tons/hr	0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 :	0.0	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00:0	00.0	0.00	00.0	3
L		0.00	0.00	0.00	0 0	8 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	8 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	000	000	3
11 despt rioming	SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	3 6	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	š
Apres commo	SO2 (Lb/Hr) C	0.0	0.0	0.0	0.0	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	2 0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	000	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3
ommon Stack	SO2 (Lb/mmBtu)	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ي المراع ومسيد	NOx Lb/Hr	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	e :	0.0	0.0	0.0	9 6	5
1000	NOX LEVENES COMMON SHOCK	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0,000
Common Stack		0.0	0:0	0.0	0.0	0.0	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ò
-		0	0	0	0 (o c	0	0	0	0	0	0	0	0	o	0	0 1	9 (o c	0	0	0	0	0	0	0	o	0	0	0 (-		0	0	0	0	0	0	0	0	0 (0 (0 (o c	>
_	Load MW Value	0	0	0	0 0			0	0	0	0	0	0	0	0	0	0 (5 0	9 6	0	0	0	0	0	0	0	0	0	0	0 (5 C		0	0	0	0	0	0	0	0	0 (0 1	0 (0 0	Э
	Date/Hour	03-12-2015 12	03-12-2015 13	03-12-2015 14		03-12-2015 15				03-12-2015 21	03-12-2015 22	03-12-2015 23						03-13-2015 05	03-13-2015 05				03-13-2015 11	03-13-2015 12	03-13-2015 13		03-13-2015 15				03-13-2015 19			03-13-2015 23	03-14-2015 00	03-14-2015 01	03-14-2015 02								03-14-2015 10
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

7		c	0	۰ ،	.		0	0	0	0			.			0	0	0	0	0	0	0	0	0	0	0 (0 (0 (5 0			0	0	0	0	0	0	.	-	5 C	0	0	0
	HF (lb/hr)	~	~	- '		_	_	_	_	- '	- '	- `		-	_	_	_	_																										
	HCI (lb/hr)	0	0	0 (o 0		0	0	0	0	0 (0 (-	• •		0	0	0	0	0	0	0	0	0	0	0 '	0 '	0 (0 (0 0		0	0	0	0	0	0	0 (- (00	o c	00	• •	0
	Mercury (Ib/hr)	0	0	0 (o c	· c	0	0	0	0	0	0 (5 C	o c		0	0	0	0	0	0	0	0	0	0	0 1	0 (0 0	0 (o c	-	0	0	0	0	0	0	0 (.	9 0	o c	9 0	· c	0
	Mercury (lb/TBtu)	0.000.0	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0000	0.0000
	2 E		_	0 (.					0	0	0 (5 6		, _	. 0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0 0	- -	, 0	0	0	0	0	0	۰ ،	o (0 0	.			0
	Lead (lb/hr)																						_	_	_	_	_		_	0 0								۵ ,	_ ,	.	~ .			
	PM-10 (LMHr)	0	0	0 (00			0	0	0	0	0	9 (, ,		0	0	0	0	0	0	0	0	0		0					, .		Ü								, .		
	PM~10 (Ib/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0 1755	0.1255
	Caal tons/hr	0.00	0.00	0.00	0.0	8 6	0.0	0.00	0.00	0.00	0.00	0.0	0.00	0.00	8 6	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	8 6	0.00
		0.00	0.00	0.00	0 0	8 6	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	8 6	800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	800	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	8 6	0.00
	mon Stack Uni (Tons/Hr)	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	8 6	9 0	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	9 6	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	3 6	0.0
	Common Stack Common Stack Common Stack Unit Operation (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0	0.0	0:0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	9 6	200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 0	8.0
	5 S	_	_	_				_	_				_ ,					_	_	_	_	0	0		_	0	0	0	0			. c	. 0	0	0	0	0	0	0	0	0 (۰ د	.	
	ommon Stack SO2 (Lb/mmBtu)	0.0000	0.0000	0.000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000
	mmon Slack VOx Lb/Hr	0.0	0.0	0.0	0.0	9 6	9 9	0.0	0.0	0.0	0.0	0.0	0.0	0 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	8 8
	Common Stack Common Stack NOx Lo/mmBtu NOx Lo/Hr	0.0000	0.0000	0.0000	0.0000	0.000	0,0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0000	00000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0,000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000
	<u>88</u>	_						0			_	0	0	0 (0	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	2 6	9 0
	Common Stack Hear Input (mmBtu)	0.0	0.0	0.0	0.0	0.0	3 0		0.0				0.0				000				0.0																							
	SS	0	0	0	0 (o c	- 0	0	0	0	0	0	0	0 (0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 '	5 C	0	0	0	0	0	0	0	0	0	0 0	-	0
	YT02 Gross Load MW Value			_				_	_	_	_	_		_	. .					_	_	_	_	_	_		_	_		_	o .	٠.			_		c			D	0	.	o r	
	YT01 Gross Load MW Value	0	0	0	0 (> •	9 0	0	0	0	0	0	0	0 (.	o c		, ,	. 0	0	0	0	•	O	O	J	S	J	J		. ·	. د	, (, 0		J	J	•	J	J	_	_ (_ (
	Date/Hour	03-14-2015 11	03-14-2015 12	03-14-2015 13			03-14-2015 15			03-14-2015 20	03-14-2015 21	03-14-2015 22			03-15-2015 01					03-15-2015 07		03-15-2015 09	03-15-2015 10	03-15-2015 11	03-15-2015 12	03-15-2015 13	03-15-2015 14	03-15-2015 15	03-15-2015 16			03-15-2015 19				03-16-2015 00	03-16-2015 01	03-16-2015 02				03-16-2015 06		03-16-2015 09
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)	0	0	0	9 6		0	0	0	0	0	0	0 (- 0	5 6	o c		0	0				0 (o c			0								, ,
HCI (lb/hr)	0	0	0	00	. 0	0	0	0	0	0	0	0	9 0	o c			0	0	0	0	0	0 '	0 '	5 6								9 0								_		
Mercury (lb/hr)	0	0	0	0 0	o	0	0	0	0	0	0	0 (o (5 C	.	•	0	0	0	0	0	0 '	0 1	5 0	0		0	0	0	0 0	o c		0	0	0	0	0	0 (0 (0 (. 0
Mercury (ib/TBtu)	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.0000
Lead (lb/hr)	0	0	0	0 0	9 0	0	0	0	0	0	0	0 (> c	> 0	.	9 0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0 (9 0	0 0		0	0	0	0	0 (0 (0 0		0
PM-10 (Lb/Hr)	0	0	0	0 0	0 0	0	0	0	0	0	0	0 (o 6	o 6	5 6	-	0	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0)	0 0	0	0	0	0	0	0 (0 (0 0		. 0
PM-10 (Ib/mmBw)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	2571.0	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
ons/hr	0.00	0.00	0.00	0.00	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.6	0.00	8 6	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	8 6	000	0.00	0.00	0.00	0.00	0.00	9 9	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	000	3 6	000	0.0	0.00	0.00	0.00	0.00	0.0	0.0	8 6	8 8	0.0	0.00	0.00	0.00	8 6	9.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Common Stack Common Stack Common Stack Unit Operation Stack Soz (Lb/hfr) CO2 (Tons/H/t) (minutes)	0.0	0.0	0.0	0.0	9 6	8 8	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	o 6	9 6	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 9	0.0	0.0	0.0	0.0	0.0	3 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0
n Stack Comin (Lb/Hr) CO2	0.0	0.0	0.0	0.0	3 6	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0:0	0.0	0.0	0.0	0.0	0.0	90	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	8 8
2 SO2	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.000.0	0.0000	0.000.0	0.000.0	0.0000	0.000	0.000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	0.0000
Back Commor	0.0			0.0			0.0			0.0		0.0		0.0		0.0		. 0							0.0							0.0										8 8
K Common Si				0.0					0	0	0	0	o .	0	0 (0 0		. 0		0	0	0	0	0 (.			0	0	o	0 (2 9		. 0	Q	Q	<u>o</u>	8	9	2	B 9	2 0
Common Stack Common Stack NOx Lo/mmBtu NOx Lb/Hr	0.0000	0.0000	0.0000	0.0000	00000	0.000		0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0,0000	0.0000	0.0000					0.0000				0.0000			0.0000										0.0000
ommon Stack Hear Input (mmBtu)	0.0	00	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	9 6	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	(lb/TBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000
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	(Lb/Hz)																																						
67	(Ib/mm8tu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
1_		0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.0	8 8	0.00	0.00	0.00	0.00	9 6	8 6	0.00	0.00	0.00	8 8	8 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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2	Init Operation (minutes)	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	0.0	0.00	0.00	0.00	9 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	n Stack L	0.0	0.0	0.0	3 8	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	8	0.0	0.0	0.0	3 6	9 0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	00 0	9 6	0.0	0.0	0.0	0.0	0.0	0
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	imon Staci 2. (Lb/Hr)	0.0	0.0	0.0	3 0	0.0	0.0	0.0	0.0	0.0	0.0	3 8	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	8 0	0.0	0.0	0.0	5 6	io	Ö	o	o	o ·	o
Tock	SO	0.0000	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.000	0.0000	0.000.0	0.000.0	0.0000	0.000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.	0.000.0
S nammer	SO2 (Lb/mmB	0.0	0.0	0.0	000	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3	0.0	0.0	0.0	0.0	3 0	0.	0.0	0.0	0.0	3 6	ö	0.	ö	9 6	3 6	0.0	9	ö	ö	ä
	Common Stack Common Stack Soc Soc Clark Oct. Common Stack Common Stack Unit Operation Coal tonshr Heat Input Nox Lahr (Lahringtan) Soc (Lahr) Coz (Tonshr) (minutes) Coal tonshr (mmbtu)	0.0	0.0	0.0	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l	Stack Co	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.000
l	Common NOx Lb/r	o																																					
Joseph Property	et input imBtu)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	000	000	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0:0	0.0	000	0:0	0.0	0.0	0.0	000	0.0	0.0	0.0	9 6	900	0.0	0.0	0.0	0:0	0.0
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	Mercury (lb/TStu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0000	0.0000	0.0000	0.0000	0.0000						0.0000					
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	PM-10 (Lb/Hr)	0	0	0	0 0		0	0	0	0	0	0 0	o c	· c	0	0	0	0	0	0	0	0 (0	0	0 (0 0	-	> c	· c	0	0	0	0	0	0	0 (-	0 (-		> 0	· c	> <	0
	1.0																																											
	PM-10 (lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	257T.U	0.1255	0.1255	0.1255	CC21.0	0.1255	0.1255	0.1255
	Į.	0.00	0.00	0.00	0.0	8 6	0.00	0.00	0.00	0.00	0.00	0.00	8 8	800	000	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.00	0.00	9 6	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	0.00	3 6	3 6	3 6	3 6	3 6	0.00
	Coal tons/hr																																						_					
	Common Stack Common Stack Common Stack Unit Operation S02 (Lb/Hr) CO2 (TonsHr) (minutes)	0.00	0.00	0.00	0.0	8 6	0.0	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	8 6	000	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	8 6	8 6	0.0
	ack Un	0:0	0.0	0.0	0 0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	90	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	2 6	3 6	200	0.0	0.0	0.0	0:0	0.0	0.0	3 3	0.0	0.0	2 6	2 6	9 6	9 6	88
	Common Si CO2 (Tons																																											
	Stack DAHr)	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3 6	00	0.0	0.0	0:0	0:0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0 0	3 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6)))	3 6	3 6	900
	Common SO2 (1																																											
	Common Stack SO2 (Lb/mmBtu)	0.000.0	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.000		0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0000		0.0000
		Ü	Ü																																									
	Common Stack NOx Lb/mmBtu NOx Lb/Hr	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	000	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 6	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	9 6	0.0	9 6	9 6	3 8
	Bu Con	8	8	8	8 8	3 8	8 8	8	8	00	00	8	8 8	3 5	2 2	8	00	8	8	8	8	8	8	8	00	8 9	0.0000	0.0000	0000	0.0000	0.000.0	0.000.0	0.0000	0.000	0.000.0	0.000.0	0.000	0.0000	0.0000	0.000	0.0000	00000	00000	0.0000
	mmon St x Lb/mm	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000		0.000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0	000	5 6	0	Ö	0.0	0.0	0.0	0.0	0.0	0.0	0.0	000	5 6	0 0	3 6	3 6	8 8
	SZ X	0.0	0.0	0.0	0.0	9 6	000	0.0	0.0	0.0	0.0	0.0	0.0	9 6		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 6	9 0	0.0	0.0	0.0	0:0	0.0	0.0	0 :	0.0	0.0)))	0.0	9 6	9 6	0:0
	Common Stack Heat Input (mm8tu)																																											
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	YT02 Gross Load MW Value																		_		_	_	_	_	_	_	_	_	_			_		_	_	_	_	_	_			. -		
	YT01 Gross Load MW Value	0	0	0	0 0	0 0	0	0	0	0	0	0	0 0			0	0	0	0	0	0	0	0	0	0	0	0	0 (, ,	9 0	, 0	0	O	J	J	J	ں	J	، ب	ه د	، د	، د	, (00
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	. Date/Hour		2015 0	2015 0							2015	2015	03-24-2015 1	. cuto.	2015		2015 2				-2015 (03-25-2015 0	03-25-2015 0	03-25-2015 (-2015 (03-25-2015 08	03-25-2015 09					03-25-2015 15	03-25-2015 1	03-25-2015 1	03-25-2015								03-25-2015 UZ	03-26-2015 (
	Date	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-24-2015	03-25-2015	03-25-2015	03-25-2015	03-25-2015	03-25	03-25	03-25	03-25-2015	03-25	03-25	03-25	03-25-2015	03-25-2015	8 5 5	03-25	03-25	03-25	03-25	03-25	03-25	03-25	03-25	47-50 47-60	03-26	97-50	97-50	03-26

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	HF (lb/hr)	J	U	C					,					, ,	,	,	,	-			, .	, .	, _	, .		, ,		_	J																		
	HCI (IB/hr)	0	0	0	0	0	0 (Э (0	0	0	0 (5 (-	-	- 0	5 (> 0	> 0	o c	0 0	, c	• -	o c	o c	• -	0	0	0	0	0	0	0	0	0 (.	0 (.	0 (0 (-	5 6	5 6	.			5
	Mercury ((b/hr)	0	0	0	0	0	0 (Э (0	0	0	0 (o 1	- •	- •	- (5 6	o 0	o 0		,	• •		9 6	9 6		0	0	0	0	0	0	0	0	•	-	o (-	0 (o •	5 (- (-	5	-	- (>
	Mercury (Ib/TBtu)	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.000	00000	0000	0000	0000	0000	0.000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000
	Lead (lovhr)	0	0	0	0	0	0 (0	0	0	0	0 (0	-	> (- •	> (5 6	> 0	0 0	0 0	o c	o c	5 C	9 6	· c	0	0	0	0	0	0	0	0	o (-	0 (> •	0 (0 (o (5 6	5 0	9 0	.	- (>
	PM-10 (LN/H1)	0	0	0	0	0	0 (0	0	0	0	0 (0	- (- (- •)	>	o 6		0 0	, c		-	.	· c		0	0	0	0	0	0	0	0 (> (0 (> (0 (0 (o (o (0	5 6	5 0	- (>
	PM-10 (lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1233	0.120	0.1253	0 1255	0.125	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	U.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	Coal tons/hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.0	0.00	0.00	0.00	3 6	9 6	3 6	3 5	8 6	8 6	8 6	8 6	8 8	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00	0.00	00:0	0.00
		0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	8 6	3 6	3 6	9 6	9 0	800	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	00.0	0.00	0.00
	mmon Stack Ur	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	9 6	3 6	3 6	9 6	6	8 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	nmon Stack Co 32 (Lb/Hr) CO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	2 6	9 6	8 6	9 0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0
	Common Stack Common Stack Unit Operation So2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0,000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	NOx Lb/Hr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3 6	9 6	9 6	9 6	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Common Stack Common Stack NOx LovmmBtu NOx Lb/Hr	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	00000	0,000	0.0000	00000	0.0000	0,000	0.000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Common Stack Co	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3 6	0 6	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	YT02 Gross Co. Load MW F	0	0	0	0	0	0	0	0	0	0	0	0	Б,	0 1	0	0	0 (0 (5 (5 6	0 0	> c	> 0	9 0	0 0	o c	0	0	0	0	0	0	6	0	0	0	0	0	0	0	o ·	o (o •	0 (0 1	0
	YT01 Gross Load MW L	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (- (- ·	- (5 0	-	> c		o c		. 0	0	0	0	0	0	0	0	0	Б	0	0	0	0	0 (0 (0 (0 '	0
	Date/Hour	03-26-2015 05		03-26-2015 07							03-25-2015 14											05-77-5015 01	03-27-2015 02		03-2/-2015 04							03-27-2015 12	03-27-2015 13														03-28-2015 03
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	HF (Ib/hr)	_	-	'		_		-																																					
	НСІ (ІБ/Ін)	0	0	0 (5 0	0	0	0	0	0	0	0	0 0	0 0	0		•		0	0	0	0	0	0	0	0	0	0 (0 (5		0 0	0	0	0	0	0	0	0 0	5 (5 (> 0	0 0	- '	5
	Mercury (lb/hr)	0	0	0 (0 0	0	0	0	0	0	0	0	0 0	o (o 0	o c	· c	0	0	0	0	0	0	0	0	0	0	0 (0 (0 0	> 0	0 0	0	0	0	0	0	0	0 0	0 (> 0	5 6	0 0	-	5
	Mercury M	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.000	00000	0.000	0000	00000	0.0000	0.000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	00000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000
ļ		0	0	0	0 0	, 0		0	0	0	0	0	0 1	5 (.	.	, c	, c	. 0	0	0	0	0	0	0	0	0	0 1		0 (-		, 0	0	0	0	0	0	0 (0 (٥ ،	0 0	.	-	5
	PM-10 Lead (lb/hr)																				_		_	_	_	_	_	_	_					_	_	_	_	_		_	~ .	.	0 6	_	_
	PM-10 (Lb/Hr)	0	0	0	0 0			0	0	0	0	0	0 (o (.	o c		• •	, 0	0	0	0	0	0	0	0	O	0			_ (, .			Ĭ	Ū				•	,	,	_	_
	РМ-10 (ib/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	CC1120	U.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	Coal tons/hr	0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	8 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	800	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0 0	8 6	8 8	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	mmon Stack Ur 32 (Tons/Hr)	0:0	0:0	0:0	0.0	9 5	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0 6	3 6	3 6	000	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	00	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0
	ionmion Stack Common Stack Common Stack Unit Operation SQ2 (LbHr) CO2 (TonsHr) (minutes)	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0:0	0.0	0 0	2 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0
	Common Stack Co SO2 (Lb/mm8tu)	0,0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Common Stack Co	0.0	0.0	0.0	0.0	9 6	900	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0)))	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Stack Comm	0.0000	0.0000	0.000.0	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.000	0.000	0000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0,000.0	0.0000	0.0000	0.0000	0000	0,000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0000	0.000	0.000.0	0.0000	0.0000	0.0000
	Common Slack (NOx Lb/mmBtu	o	o	o	0 0	<i>i</i> c	9 0	o	Ö	o	Ö	Ö	o	o	o i	oi (⇒ 6	⇒ •	<i>i</i> c	id	Ö	0	0	0	0	0	0	0	0	0	0	0 (o c		0	0	0	0	•	Ö	0	0	0	0	0
	Common Stack Heat Input (mmBtu)	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3 6	9 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 9	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0
	ross Cor fW	0	0	0	0 0	- C	0	0	0	0	0	0	0	0	0	0	5 (5 (o c) C	. 0	0	0	0	0	0	0	0	0	0	0	0 (.	, c	0	0	0	0	0	0	0	0	0	0	0
	YT02 Gross Load MW Value					-																				_	_	_	_	_	_	_	_				_	_	_	_	_	_	_	_	_
	YT01 Gross Load MW Value	0	0	0	0 (0	0	0	0	0	0	0	0	0 (> 6	5 C	o c		0	0	0	0	0	0	0	0	0	0	0 (-	· C	. 0	. 0	0			S			0	J	J
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)	0	0	0 (- 0		0	0	0	0	0 (, 0	U	Ü		Ü	0			0					,			, .	, ,	_	_	J										-
HCI (lb/hr)	0	0	0 (00	0	0	0	0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0	0	0 0	> (-	-	o c	0 0	0	0	0	0	0	0	- 0	90	0 0				0	0
Mercury (lb/hr)	0	0	0 (0 0	0	0	0	0	0	0 (0 0	o c	0 0	0	0	0	0	0	0	0	0	0	0	0 0)	> 0	> 6	.	o c	0	0	0	0	0	o (- (-	o c	.	o c	o c	9 6	
Mercury (lb/TBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.000	0.000	0.000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	00000	0.0000	0.000	0.000	0.0000
) (uu)	0	0	0	o c		0	0	0	0	0	0 (5 C		0	0	0	0	0	0	0	0	0	0	0 (o (> (> 0	.	,		0	0	0	0	0 (5 (5 (> c	5	5 C	,	9 0	0
Lead ((b/hr)																																											
PM-10 (Lb/Hr)	0	0	0	o c	0	0	0	0	0	0	0 (-	· -	0	0	0	0	0	0	0	0	0	0	0 (0 (> (0 0	> 6		. 0	0	0	0	0	0 (- 1	0 (9 0	> (> c	>	o c	
PM-10 P (Ib/mmBtu) (L	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	0	0	0	0 0		. 0	0	0	0	0	0 (.	• •		0	0	9	9	0	9	9	0	2	2 9	2 9	2 9	2 9	2 9	2 5	2 2	8	8	8	8	8 :	2 :	2 ;	0.00	2 2	0.00	0.00	9 6	0.00
Coal tons/hr	0.00	0.00	0.00	0.00	00.0	0.0	0.00	0.00	0.00	0.00	0.00	00.0	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0						0.00														
nit Operation (minutes)	0.00	0.00	0.00	0.00	8 6	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Stack Common Stack Unit Operation SO2 (LbHr) CO2 (TonsHr) (minutes)	0.0	0.0	0.0	0.0	9 9	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3 5	2	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2 6	3 6	00
on Stack Com (Lb/Hr) CO2	0.0	0:0	0.0	0.0	9 0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	9 6	2 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	8 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0
Common Stack Comm SO2 (Lb/mmBtu)	0.0000	0.000.0	0.000.0	0.0000	00000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	00000	0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.000.0	0.000.0	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Common Stack SO2 (Lb/mmBtu)																																											
ommon Stack NOx Lb/Hr	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0:0	0.0	2 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0, 0	0.0
Common Stack Heat input InmBlui NOX Lb/mmBlu NOX Lb/mmBlu	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ut NO	0.0	0.0	0.0	0.0	2 6	9 9	0:0	0.0	0.0	0.0	0.0	0. 6))))	3 6	00	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	9 9	0.0	000	9 0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	900
Common Si Heat Inpu (mmBtu	_	0		0 6			_	0	0	_	0	-					_		_		0		_	0	_	_		0	0 (0			0	0	0	0 (0	0 (0 (.	. 0
YT02 Gross (Load MW: Value	J	Ü					_	Ü	Ü	J	_						_	_			_	_	_	_			_	_														-	
YT01 Gross. Load MW Value	0	0	0	0 0		0	0	0	0	0	0	0	0 6			0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	9 6	0	0	0	0	0	0	0	0	0	0 (0 (00	0
DaterHour	03-30-2015 03			03-30-2015 06					03-30-2015 12	03-30-2015 13			03-30-2015 16					03-30-2015 22	03-30-2015 23	03-31-2015 00	03-31-2015 01	03-31-2015 02	03-31-2015 03			03-31-2015 06				03-31-2015 10	03-31-2015 12	03-31-2015 13	03-31-2015 14	03-31-2015 15							03-31-2015 22	03-31-2015 23	

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	0	J	J	J	J	J	٠	٥	0	0	0 (. ر	، ت	٠ ر	، ر	٠ ر	_	_	_	_		_ '	_	7
HCI (lb/hr)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0 '	0	0	0	0	0	0	0	0
Mercury (lb/hr)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	0
Mercury (b/TBu)	- -	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0.0000	0.0000	0.0000	0.0000
£	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead (lb/hr)																																																
PM-10 (Lb/Hr)	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (lb/mmBtu)	-	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	<u></u>	0.0	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00'0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1		_	_	_	_	_	_	_	_	_	_		0	0		0	6	0	0	0	0		0	0			0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Juit Operation (minutes)		0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Stack Unit Operation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Co	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S Co.	-	_	_	_	_	_	_	0	0		0	0		_	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	o	0	0	0	2	ō	ō	o	o	0	8
Common Stack SO2	(Lovembetta)	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000
Common Stack Common Stack Common Stack Heat Input NOX I Manager NOX I MHr		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C .	_	0.000.0	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.0000	0.000.0	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.000.0	0.000.0	0.0000	0.000.0
Ommon S	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.	9.	0.0	0.0	0.0	9	0.0	9.	9	ö	0.0	0.0	9	0.0	ö	ö	ö	ö	0	0.0	0	ö	ö	ö	ö	ö	0.0
S E	_	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common St Heat Inpu	(mmBin																																															
YTOZ Gross	Value	0	0	0	0	0	0	0	0	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
sea ×	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	0
YT01 Gross Load MW	Value																																															
Date/Hour		04-01-2015 02			04-01-2015 05	04-01-2015 06	04-01-2015 07	04-01-2015 08	04-01-2015 09	04-01-2015 10	04-01-2015 11	04-01-2015 12	04-01-2015 13	04-01-2015 14		04-01-2015 16		04-01-2015 18	04-01-2015 19	04-01-2015 20	04-01-2015 21	04-01-2015 22	04-01-2015 23	04-02-2015 00	04-02-2015 01	04-02-2015 02	04-02-2015 03	04-02-2015 04	04-02-2015 05	04-02-2015 06	04-02-2015 07	04-02-2015 08	04-02-2015 09	04-02-2015 10	04-02-2015 11	04-02-2015 12	04-02-2015 13	04-02-2015 14	04-02-2015 15	04-02-2015 16	04-02-2015 17	04-02-2015 18	04-02-2015 19	04-02-2015 20	04-02-2015 21	04-02-2015 22	04-02-2015 23	04-03-2015 00
1		5	9	8	8	8	8	8	9	2	8	8	g	8	8	9	9	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	8	8	8	ŏ	ŏ	ŏ	ŏ	ð	ŏ	ŏ	ő	ŏ	ŏ	ŏ	ŏ	ŏ

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)			U								0				_	_	_	_	_	_	_	_	_	_	Ū	_	_	_	_	_	_	_	_	_													
HCI (lb/hr)	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0
Mercury HCI (lb/hr)	0	0	0	0	0	0 (0 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0
Mercury (b/TBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Lead (larinr)	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (Lb/Hr)	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (US/mm/dl))	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
oal tons/hr	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
t Operation C	000	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
nmon Stack Un 2 (Tons/Hr)	0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0
Common Stack Common Stack Common Stack Unit Operation Cost tonshir Librariabili SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes) Cost tonshir	0	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SO2 Suck Co	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000
mmon Stack Oc	ć	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack NOx Lb/mmBtu NOx Lb/Hr	00000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0,0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Common Stack Co Hear Input (mm8tu)	ć	3 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YT02 Gross Cor Load MW P	c	o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT01 Gross YT Load MW L	-		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT Date/Hour L	3			04-03-2015 04	04-03-2015 05		04-03-2015 07	04-03-2015 08	04-03-2015 09	04-03-2015 10	04-03-2015 11	04-03-2015 12	04-03-2015 13	04-03-2015 14	04-03-2015 15	04-03-2015 16	04-03-2015 17	04-03-2015 18	04-03-2015 19	04-03-2015 20	04-03-2015 21	04-03-2015 22	04-03-2015 23	04-04-2015 00	04-04-2015 01	04-04-2015 02	04-04-2015 03	04-04-2015 04	04-04-2015 05	04-04-2015 06	04-04-2015 07	04-04-2015 08	04-04-2015 09	04-04-2015 10	04-04-2015 11	04-04-2015 12	04-04-2015 13	04-04-2015 14	04-04-2015 15	04-04-2015 16	04-04-2015 17	04-04-2015 18	04-04-2015 19	04-04-2015 20	04-04-2015 21	04-04-2015 22	04-04-2015 23

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нг (вълт)	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o (0	0	0	0	0	0		5 (0 •	0	0 (0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o .	o (0	0	0 (0	0
(lb/hr) HCI (lb/hr)		0	0	0	0	0 .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0 (0	0
Mercury (Ib/hr)																																															
(Ib/TBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Lead (lb/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (Lb/H1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (15/mm8ш)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/lir	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00
non Stack Unit (Tons/H/) (.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0:0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0
Common Suck Common Stack Common Stack Unit Operation SO2 (Lb/Ht) CO2 (Tons/Ht) (minutes)	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SO2 (Lb/mmBtu)	0,000	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000.0	0.000	0.000.0	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000,0	0.000	0.000
	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0
SE NOX L	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	00	8	8	8	8	8	00	00	00	8	8
Common Sta NOx Lb/mmi	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000					0.0000		0.000	0.0000
Heat Input NOx Lb/mm8tt NOx Lb/Hr (mm8tt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Load MW		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Load MW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Date/Hour I	04-05-2015 00			04-05-2015 03	04-05-2015 04	04~05-2015 05	04-05-2015 06	04-05-2015 07	04-05-2015 08	04-05-2015 09	04-05-2015 10	04-05-2015 11	04-05-2015 12	04-05-2015 13	04-05-2015 14	04-05-2015 15	04-05-2015 16	04-05-2015 17	04-05-2015 18		04-05-2015 20	04-05-2015 21			04-06-2015 00	04-06-2015 01	04-06-2015 02	04-06-2015 03	04-06-2015 04	04-06-2015 05	04-06-2015 06	04-06-2015 07	04-06-2015 08	04-06-2015 09	04-06-2015 10	04-06-2015 11	04-06-2015 12	04-06-2015 13	04-06-2015 14	04-06-2015 15	04-06-2015 16	04-06-2015 17	04-06-2015 18	04-06-2015 19	04-06-2015 20	04-06-2015 21	04-06-2015 22

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	HF (lb/hr)	Ü	U			, (, 0			_	_			_ `	,						_	_	_	_	_	_																				
	HCI (lb/hr)	0	0	0	o c		0	0	0	0	0	0	0 (90	o 6	O	.		· -		0	0	0	0	0	0	0	0	0	0	0	0	0 (0 0	- •	0 0	-	5	.	, ,) C	5 C)
	Mercury (Ib/hr)	0	D	0	00		00	0	0	0	0	0	0 (5 6	> (> 6	5 C	5 C	o c	0	0	0	0	0	0	0	0	0	0	0	0	0	ים	0 (- '	0 (- 0	> 6	0 0	o c	o c	o c	, c	o c		כ
	Mercury (Ib/TBtu)	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0000	0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0000	0000	0000	0.000	0.000	00000	0.000
	ad (lb/hr)	0	0	0	00	> 0	0	0	0	0	0	0	0	5 6	> (5 (>		o c	o C	0	0	0	0	0	0	0	0	0	0	0	0	0	۰ ۵	יכ	0 (- (5 0	o c	> <	o c	.	5 C) C	5 C	2
	PM-10 Lead (lb/hr)	0	0	0	0 0	.	0 0	0	0	0	0	0	0	5 (5 (o (5 6	.		o c	, 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (9	0 (-	- (5 6	-	.	.	5 C	> C	5 6	2
	PM-10 (lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.4255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	oal wns/hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.0	9 6	8 6	8 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	9.6	9.6	9.6	00.00	0.00	00 00 00 00 00 00 00 00 00 00 00 00 00	0.00	0.00
	t Operation C (minutes)	0.00	0.00	0.00	0.00	0.00	000	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	8 6	800	0.00	0.00	0.00	0.00	0.00	00'0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00:0	8 8	00.0	00.0	0.00	0.00
	mmon Stack Un 32 (Tons/Hr)	0.0	0.0	0.0	0.0	0.0	9 6	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	9 6	0.0	0.0	0.0
	Common Stack Common Stack Common Stack Unit Operation Coal boshin SO2 SO2 (LbHr) CO2 (Tons/H) (minutes)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ommon Stack Co SO2 (Lb/mmBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	ommon Stack NOx Lb/Hr	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	9 6	9 6	2	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ommon Stack Co	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0000	0.000	0.000	0.000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Common Stack Heat input Inox Lb/mmBtu Nox Lb/Hr	0.0	0:0	0.0	0.0	0.0	0.0	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	2 6	9 6	2 6	00	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	YT02 Gross C Load MW Value	0	0	0	0	0	00	o c	0	0	0	0	0	0	0	0	0	0	5 (5 6	o c	· c	· c		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	5 (0 (0 '	0
	Y701 Gross Load MW Value	0	0	0	0	0	0 0				0	0	0	0	0	0	0	0	0 (0	-			• •	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0
	Date/Hour	04-06-2015 23					04-07-2015 04				04-07-2015 09	04-07-2015 10	04-07-2015 11	04-07-2015 12			04-07-2015 15	04-07-2015 16	04-07-2015 17		04-07-2015		04-07-2015 21	04-07-2015 23	04-08-2015 00	04-08-2015 01			04-08-2015 04	04-08-2015 05	04-08-2015 06	04-08-2015 07	04-08-2015 08	04-08-2015 09	04-08-2015 10	04-08-2015 11	04-08-2015 12					04-08-2015 17			04-08-2015 20	04-08-2015 21

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HF (lb/hr)	0	0	0	00			0	0	0	0	0 (0 0	o c	0 0		. 0	0	0	0	0	0	0	0	0	0	0	0 (0 (56	.		0	0	0	0	0				,	, (, ,	, ,	,
HCI (lb/hr)	0	0	0	0 0	0 0	0	0	0	0	0	0	0 0		-		0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (5 C		0	0	0	0	0	0 (- (0 0	- (-	- 0		>
7.5	0	0	0	0 0	· c	0	0	0	0	0	0	0 (5 C	o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0 4	5 C	0	0	0	0	0	0	0 1	-	0 (- ·	-	-	o c)
Mercury Mercury (lb/TBu) (lb/hr)	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	00000	0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0,000	0.0000
Lead (Ib/hr)	0	0	0	0 0		0	0	0	0	0	0	0 0	-	-	o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (5 6	o c	0	0	0	0	0	0	0 (0 (o (- ·		5 C)
<u> </u>	0	0	0	0 0			0	0	0	0	0	0 (.	. c		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (.	, c	0	0	0	0	0	0	0 (0 (0 (- ·	D (5 6	5
PM-10 (Lb/Hr)																		10	10	10	10		10	10	10		10					. 10	10	10	ıo	ıo	10	ın ı	ın ı	וח ו			n u	^
PM-10 PM-10 (Lb/Hr)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1235	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0,1255	6621.0	C7T.0
	0.00	0.00	0.00	0.00	8 6	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	9 6	8 6	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00	0.00	90.0	8 6	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.00	0.00
t Operation minutes)	0.00	0.00	00:0	0.00	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	8 6	000	0:0	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	000	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Stack Common Stack Common Stack Common Stack Common Stack Common Stack Unit Operation Coal tons/fr Coal	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	9 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 5	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n'n
ommon Stack Co SO2 (Lb/Hr) CC	0.0	0.0	0.0	0.0	9 6	9 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0: 0:	0.0	0.6	O.O.
CLb/mmBw)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ommon Stack ONOx Lb/Hr	0.0	0.0	0.0	0.0	3 6	3 00	0.0	0.0	0.0	0.0	0.0	9 9	0.0	9 6	3 6	8 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack C	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heat Input NumBtu)	0.0	0.0	0:0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	000	9 6	8 6	8 0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0	0	0	0 (-	. 0	0	0	0	0	0	0	0 (5 (5 6	o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (5 C	0	0	0	o	0	0	0	0	0	0	0	0 (5
YT02 Gros Load MW Value											-																							_	_			_	_	_	_	_	_	_
YT01 Gross Load MW Value	0	0	0	0 (0	0	0	0	0	0	0	ο (0 (,			0	0	0	0	0	0	0	0	0	0	0	0	0 (o د		0	0	0	0	0	J	D .	၁	، ن	، ن	، ن	_
Date/Hour	04-08-2015 22	04-08-2015 23			04-09-2015 02			04-09-2015 06	04-09-2015 07	04-09-2015 08	04-09-2015 09		04-09-2015 11		04-09-2015 13	04-09-2013 14	04-09-2015 16		04-09-2015 18	04-09-2015 19	04-09-2015 20	04-09-2015 21	04-09-2015 22	04-09-2015 23	04-10-2015 00	04-10-2015 01		04-10-2015 03		04-10-2015 05	04-10-2015 06		04-10-2015 09	04-10-2015 10	04-10-2015 11	04-10-2015 12	04-10-2015 13				04-10-2015 17			04-10-2015 20
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	нғ (15/1л)	0	O	O	0	0	0		U	U	U					_	_			_	_	_	_	_	_	_				_	_		_					_		_								_
	Mercury HCI (lb/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0 (o '	0	0 (0 (0 (0	0 (0 (0	0
	Mercury (lb/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	0	0 '	o	0	0	0	o (0	0 (0 (0	0
	Mercury (lb/TBtu)	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	PM-10 Lead (lb/hr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	0	0	0 '	0	0
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		S	2	2	2	2	2	2	S	2	2	2		υ.	ı,	'n	ıΣ	īŪ	īŪ	řΣ	iδ	ıΩ	ñ	īΩ	ž	ស	່າວັ	ñ	iΣ	ž	ĭζ	iS.	ស	ıΣ	ίζ	អ	អ	ίζ	ıχ	55	٠ <u>٠</u>	55	بر در	ıχ	ŀΣ	<u>بر</u>	ξ	55
	PM-10 (15/mm8tu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
	Coal tonsthr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0,00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00'0	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ommon Stack U	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	00	0.0	0.0	0.0
	Common Stack Common Stack Common Stack Common Stack Unit Operation NOx Lb/Hr (Lb/mmBtu) SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	SO2 (Lb/mmBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	O Slack ON Lb/Hr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0
	ommon Stack C	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	YT02 Gross Common Stack Load MW Heat Input NOx Lb/mm8tu Value (mm8tu)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0
	02 Gross C and MW Value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	YT01 Gross YT0 Load MW Lo Value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Date/Hour L	04-10-2015 21			04-11-2015 00	04-11-2015 01	04-11-2015 02	04-11-2015 03	04-11-2015 04	04-11-2015 05	04-11-2015 06	04-11-2015 07	04-11-2015 08	04-11-2015 09	04-11-2015 10	04-11-2015 11	04-11-2015 12	04-11-2015 13	04-11-2015 14	04-11-2015 15	04-11-2015 16	04-11-2015 17	04-11-2015 18	04-11-2015 19	04-11-2015 20	04-11-2015 21	04-11-2015 22	04-11-2015 23	04-12-2015 00	04-12-2015 01	04-12-2015 02	04-12-2015 03	04-12-2015 04	04-12-2015 05	04-12-2015 06	04-12-2015 07	04-12-2015 08	04-12-2015 09	04-12-2015 10	04-12-2015 11	04-12-2015 12	04-12-2015 13		04-12-2015 15	04-12-2015 16	04-12-2015 17	04-12-2015 18	04-12-2015 19
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)																																														
HCI (lb/hr)		0	0	0 (0	0	0	0	0	0	0	0	0 (- (-	o 0	> 0	o 6		.	.	5 C	> 6	o 6	> 0	> C		o c	o c		0	0	0	0	0	0	0	0	0 '		0 (-	-	- 0		>
Mercury		0	0	0 (0 0	0	0	0	0	0	0	0	0 (- (5 (o 0	> 0	.	-	-	- (> <	> 0	o 6	o (>	-	o c	o c	, ,	0	0	0	0	0	0	0	0	0	0	0 (-	-	5 C	o c	>
Mercury h	· ·	0.0000	0.0000	0.0000	0,000	00000	0.0000	0.000.0	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.000	0.000	0000	0.000	0000	0.000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0,000	0000	0.000
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Lead (lb/hr)										_	_	_		_		2 (~ .	~ .									_		_	_	_	_	0	_	.		- ·	- ·		,
PM-10	(1)	0	0	0 (9 0		0	0	0	0	0	0	0 1	o (-		,	, ,	,			, ,	, ,	, ,	,			-		, .	, .		_	_	_	_	Ŭ	_	_	_		- 1	- 1	- 1		-
PM-10	(2)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	6.175	0.1255	0.1255	0.1255	0.1255	0.125	0.1255	0.125	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	U.1255	0.1235	0.1255
Coal tons/hr		0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	000	8 6	8 8	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	000	00:0	3 6	0.00
of Operation	(comment)	0.00	0.00	0.00	90.0	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	9 6	00.0	3 6	800	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mmon Stack U	(magna) 7	0.0	0.0	0.0	0.0	9 0	0.0	0.0	0.0	0:0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0
Common Stack Common Stack Unit Operation) (iLimi) 50	0.0	0.0	0.0	0.0	2 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Co	(LymmBtu)	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ommon Stack C	E SON	0.0	0.0	0.0	0.0	6	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	2 6	200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack Sock	ох грушшана	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Common Stack C		0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	D: 6	0.0	0.0	0.0	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0
YT02 Gross Cr		0	0	0	0 0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	0 (0 (0	>	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT01 Gross		0	0	0	00	0 0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (5 (5 6	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	∍
Date/Hour		04-12-2015 20	04-12-2015 21		04-12-2015 23	04-15-2013 00		04-13-2015 03	04-13-2015 04	04-13-2015 05	04-13-2015 06	04-13-2015 07	04-13-2015 08	04-13-2015 09	04-13-2015 10	04-13-2015 11	04-13-2015 12	04-13-2015 13		04-13-2015 15											04-14-2015 U2				04-14-2015 07	04-14-2015 08	04-14-2015 09	04-14-2015 10	04-14-2015 11	04-14-2015 12						04-14-2015 18

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F	0	0	0	0 0	-	- c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0
HF (tb/hr)																														_		_	_	_	_	_	_	_	_	_	_	_			0	_
HCI (Ib/hi)	0	0	0	0 0	> (00		. 0	0	0	0	0	0	0	0	0	0	0	0						0					0	_				0						0				0	0
Mercury (lb/hr)	0	0	0	0 (Э (0) C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury (Ib/TBtu)	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000
Lead (lb/hr)	0	0	0	0 (9 (o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (LMH1)	0	0	0	0 (> (o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0			0	0	0					0	0
PM-10 (lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	0.00	0.00	0.00	0.00	000	0.00	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:00	0.00	0:00	0.00	8 6	8 8	8 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mon Stack Uni	0.0	0.0	0.0	0.0	0.0	9 6	3 6	9	9.	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0
Sormon Steck Common Stack Common Stack Unit Operation SO2 (Lb/Hr) CO2 (ТоляНт) (minutes).	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0
Common Stack Col SO2 (Lb/mmBtu)	0,0000	0.0000	0.000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000
	0.0	0.0	0.0	0.0	0.0	0.0	3 6	9 9	8 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0
Common Stack Common Stack NOx Livinin Btu NOx Livinir	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Common Stack Co Heat Input NC (mmBtu)	0.0	0:0	0:0	0.0	0.0	0.0	3 6	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YT02 Gross Con Load MW H	0		0	0	0	0 0	.	· c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT01 Gross YT0 Load MW Lo Value \	c	0	0	0	0	0 0	.	o c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Date/Hour Los	04-14-2015 19	04-14-2015 20	04-14-2015 21	04-14-2015 22	04-14-2015 23	04-15-2015 00						04-15-2015 07	04-15-2015 08	04-15-2015 09	04-15-2015 10	04-15-2015 11	04-15-2015 12	04-15-2015 13	04-15-2015 14	04-15-2015 15	04-15-2015 16	04-15-2015 17	04-15-2015 18	04-15-2015 19	04-15-2015 20	04-15-2015 21	04-15-2015 22	04-15-2015 23	04-16-2015 00	04-16-2015 01	04-16-2015 02	04-16-2015 03	04~16-2015 04	04-16-2015 05	04-16-2015 06	04-16-2015 07	04-16-2015 08	04-16-2015 09	04-16-2015 10	04-16-2015 11	04-16-2015 12	04-16-2015 13	04-16-2015 14	04-16-2015 15	04-16-2015 16	04-16-2015 17

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HF (Ib/hr)	0	0	00	0	0	0	0	0	0	0 (o c	0	0	0	0	0	0 ()	5 C	9 6		0	0	0	0	0 (5 C	0	0	0	0	0 (5 6		o C	. 0	0	0	0	0
HCI (lb/hr)	0	0	0 0	- 0	0	0	0	0	0	o (50	0 0	0	0	0	0	0	٥ (-	9 0	o c	0 0	0	0	0	0	0 (0	0	0	0	0 (0 0	-	o c		0	0	0	0
Mercury (lb/hr)	0	0	0 0	0 6	0	0	0	0	0	o •	00	9 0	. 0	0	0	0	0	0	o •	00	O C	0 0	0	0	0	0	0 0	o c	0 0	0									0	0	•
Mercury (lb/TBtu)	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000								0.0000								0.0000			0.0000	0.0000	00000
PM-10 Lead (lb/hr)	0	0	0 0		0	0	0	0								0	0	0	0	0 0	>		-	0	0	-						0							0	0	_
PM:-10 (Lb/Hr)	0		0 (-		0	0	_								0	0		0		- .			0						_											_
PM-10 (ib/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1253	0.1255	0.1255	0.1255	0.1755
Coal tons/hr	0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	000	0.0	0.00	0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	8 6	0.00	0.00	0.00	000
1.0	0.00	0.00	0.00	000	000	0.0	0.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	800	0.0	0.00	0.00	0.00	0.00	0.00	900	0.00	0.00	0.00	0.00	0.00	0.00	9 6	0.00	0.00	0.00	ç
mon Stack Uni (Tons/Hr)	0.0	0:0	0.0	0.0	9 0	0:0	0.0	0.0	0.0	0.0	0.0	0 0	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 0	0.0	0.0	0.0	0.0	0 0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	000	9 6	9 9	0.0	0.0	c
non Stack Com (Lb/Hr) CO2	0.0	0.0	0:0	0.0	2 5	0:0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 0	0.0	0.0	0.0	0.0	0.0	0.0	2 0	0.0	0.0	0:0	0:0	0.0	0.0	0 0	0.0	0.0	0.0	c
Common Stack Common Stack Common Stack Unit Operation SO2 (Lb/H) CO2 (Tons/H) (minutes)	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0,000.0	0.0000	0.0000	0.0000	0.0000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.000	0.000	0000
Common Stack Common Stack Common Stack Common Commo	0:0	0.0	0.0	0.0	9 6	0:0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 9	0.0	0.0	0.0	0:0	0.0	9 6	0:0	0.0	0.0	0.0	0.0	0:0	0.0	9 0	0.0	0.0	0
Common Stack Comm	0.0000	0.000	0.0000	0.0000	0000	0.0000	0.000.0	0.000.0	0.0000	0.000.0	0.000.0	0.0000	0.000	0000	0.000	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	
Stack Committee	0.0			0.0									0 6								0:0	0.0	2 6	9 0	0.0	0.0	0.0	0.0	0.0	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
YT02 Gross Common Stack Losd MW Heat input Value (mmBtu)	0	0	0	0 (.	. 0	0	0	0	0	0	0 (- -			0	0	0	0	0	0	0 (5 C	. 0	0	0	0	0	0 (5 C	, 0	0	0	0	0	0		o c	, 0	0	
YT02 Gros. Load MW Value																			-														_	_	_					_	
YT01 Gross Load MW Value	0	0	0	0 0	5 C		0	0	0	0	0	0	0 0			0	0	0	0	0	0	0	00	9 6	. 0	0	0	0	0	-		0	0	0	0	0		5 C	. 0	0	•
Date/Hour			04-16-2015 20		04-16-2015 22 54 16-2015 22	04-17-2015 00	04-17-2015 01		04-17-2015 03	04-17-2015 04	04-17-2015 05		04-17-2015 07	04-17-2015 08	04-17-2015 10	04-17-2015 11	04-17-2015 12	04-17-2015 13	04-17-2015 14		04-17-2015 16		04-17-2015 18			04-17-2015 22	04-17-2015 23			04-18-2015 02			04-18-2015 06	04-18-2015 07	04-18-2015 08			04-18-2015 11		04-18-2015 14	

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

		0	0	0	5 C	0	0	0	0	0	0	- •	0	0	0	0	0	0	0	0	0	0	0	-	-	o c) C	0	0	0	0	0	0	0	0	0 0	-	9	0 0	0 0	0	9	• •	0
	HF (lb/hr)																																											_
	HCI (Ib/hr)	0	0	0 (o c		0	0	0	0	0 (0 0			0	0	0	0	0	0	o	0 (0	Э (Э (o c) C		0	0	0	0	0	0	0 (0 (0 (96		-		•		
7. 1.	(lb/hr)	0	0	0 (э с		0	0	0	0	0	0 (5 C	0	0	0	0	0	0	0	0	0	0	0 (0 0	- 0	•		0	0	0	0	0	0	0	0 •	0 0	9 (3 C	o c	o c			. 0
	Mercury (lb/TBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000		0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.000	0000	0.0000
	Lead (lb/hr)	0	0	0	ь с		0	0	0	0	0	0 0		0	0	0	0	0	0	0	0	0	0	0 (0 (o 6		9 6	0	0	0	0	0	0	0	0 (0 (0 0	> 0	-	-			0
400	(Lb/Hr)	0	0	0	о с	, c	0	0	0	0	0	0 (5 C	0	0	0	0	0	0	0	0	0	0	0 (0 (o 0		o c		0	0	0	0	0	0	0 (0 (0 ()	- 6	- 0	-	o C	
4	PM-10 (lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1755	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.125	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1250	0.1255
	Coat wns/hr	0.00	0.00	0.00	0 0	3 5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	9 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	B 6	9 6	3 6	0.00
-		0.00	0.00	0.00	0.0	00.0	0.00	0.00	0.00	0.00	0.00	0.00	000	9 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00:0	866	0.00
	Common Stack Common Stack Unit Operation 302 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0	0.0	0.0	0.0	9 6	9 00	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	o o	9 6	0.0
-	ommon Slack C SO2 (Lb/Hr) C	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	000	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3 6	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	9 6	0.0
- Stack	SO2 (Lb/mmBtu)	0.0000	0.0000	0.0000	0.0000	0000	0,0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.0000	0.000	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.0000
ō	NOX LS/Hr	0.0	0.0	0.0	0.0	9 6	000	0.0	0.0	0.0	0:0	0.0	0.0	3 6	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	3 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.5	0.0	9 0	0.0
	nman Stack Co x Lb/mmBtu	0.0000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.0000
Manna Chank	Heat input Common Stack Common Stack Heat input NOx Lb/mmBtu NOx Lb/mmBtu	0.0	0.0	0.0	0.0	2 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	8 6	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	9 6	200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
roo Grass Cor	Load MW H	0	0	0	0	> c		0	0	0	0	0	0 (-	0 0	0	0	0	0	0	0	0	0	0	0	0	0 (0 0			0	0	0	0	0	0	0	0	0	0	0 (ь (0 0	00
Y Gynec Y	Load MW	0	0	0	- (5 6		0	0	0	0	0	0 (o c		0	0	0	0	0	0	0	0	0	0	0	0 (0 0		0	0	0	0	0	0	0	0	0	0	0	0	0 0	- ·	00
	Date/Hour	04-18-2015 17	04-18-2015 18	04-18-2015 19		04-18-2015 21 04 10-61 50	04-18-2015 22			04-19-2015 02		04-19-2015 04	04-19-2015 05	04-19-2015 06	04-19-2015 07		04-19-2015 10	04-19-2015 11	04-19-2015 12	04-19-2015 13		04-19-2015 15	04-19-2015 16	04-19-2015 17	04-19-2015 18	04-19-2015 19	04-19-2015 20	04-19-2015 21	04-13-2013 22	04-20-2015 00	04-20-2015 01	04-20-2015 02	04-20-2015 03	04-20-2015 04	04-20-2015 05		04-20-2015 07	04-20-2015 08						04-20-2015 15 04-20-2015 15

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	HF (lb/hr)	0	0	0		, .	, 0	J	0			0		. ر	, (, (, .	, _	, .	Ü			_	_	_	_	_	_	_		_ `				Ū	_	_		-			-		-	
	HCI (lb/hr)	0	0	0	0 0	, c	0	0	0	0	0	0	0 (-	-	0 0		0 0	0	0	0	0	0	0	0	0	0	0	0	0 (5 0	9 6	0	0	0	0	0	0 (0 (> 0	-	-	o c		3
	Mercury (lb/hr)	0	0	0	0 0	o c	0	0	0	0	0	0	0 (5 (- ·	- 0	5 6		0	0	0	0	0	0	0	0	0	0	0	0 (0 0	0 0	0	0	0	0	0	0 (0 (0 0	-	-	.	· ·	>
	Mercury (lb/TBtu)	0.000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0000	0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0000	0.000
	Lead (lb/hr)	0	0	0	0 0		0	0	0	0	0	0	0 (Э (5	-	5 6		9 0	0	0	0	0	0	0	0	0	0	0	0 (o (>	0	0	0	0	0	0	0 (0 0	> (> (-	>	>
	PM-10 (Lb/Hr)	0	0	0	0 0	o c	0	0	0	0	0	0	0 1	D (o (> 0	- 0	o c	0 0	0	0	0	0	0	0	0	0	0	0	0	0 (o c	0	0	0	0	0	0	0	0 (0 0	> 0	-	.)
	PM-10 (ib/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1253	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1433	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1755	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	U.1237
	Coal tons/fir	0.00	0.00	0.00	0.00	3 6	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	9 6	8 8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.0	0.00	0.00	0.00	0.00	9.00	0.00	0.00	0.00	0.00	000	20.0
		0.00	0.00	0.00	0.00	9 6	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	9 6	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.00	000	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	00:0	00.0	0.00
	nmon Stack Un 2 (Tons/Hr)	0.0	0.0	0:0	0:0	2 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0)))	3 6	9 9	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	O.O.
	nmon Stack Cor 32 (Lb/Hr) CO	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	o:o
	K Common Stack Common Stack Common Stack Unit Operation SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	00000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.000	0,0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000
	nmon Stack Cor IOx Lb/Hr	0.0	0.0	0.0	0:0	2 6	8 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	2 6	9	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	O.O.
	Common Stack Common Stack NOx Lb/mmBtu NOx Lb/Hr	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.000	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	Common Stack Co Heat input NC	0.0	0:0	0:0	0.0	0.0	2 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	YT02 Gross Cor Load MW H	0	0	0	0	0 (- -	0	0	0	0	0	0	0	0	0	0	0 (.		0	0	0	0	0	0	0	0	0	0	0		9 6	0	0	0	0	0	0	0	0	0	0 (о (.
	TOT Gross Dad MW Value	a	0	0	0	o (9 0	. 0	0	0	0	0	0	0	0	0	0	0 (.			0	0	0	0	0	0	0	0	0	0	0 (> C		0	0	0	0	0	0	0	0	0	0 (5
	Date/Hour	04-20-2015 16	04-20-2015 17				04-20-2015 21		04-21-2015 00		04-21-2015 02	04-21-2015 03				04-21-2015 07		04-21-2015 09	04-21-2015 10					04-21-2015 16	04-21-2015 17	04-21-2015 18	04-21-2015 19	04-21-2015 20	04-21-2015 21				04-22-2015 01			04-22-2015 05	04-22-2015 06								04-22-2015 14
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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	HF (Ib/hr)	0	0	0	00	, (. 0	0	O	0	0	0		0	ن	Ų	Ų	J	J	ی	٠	J	Ų	J	Ų	J	J	_	·	J	J	_		_ '		_ (- (_ (_ (_	- (•
	HCI (lb/hr)	0	0	0	00	o c	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9 (-	5 6	> 6	5 (-	-	o c	5 C	o c) C	o c	,
	Mercury (Ib/hr)	0	0	0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	O	5 6	5 6	> 0	5 6	- (-	-	.	5 C) (0 0)
-	(lb/TBtu) N	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0.0000	0.000	0.0000	0.000	0.000	0.000	0000	00000	00000	00000	200
_		0	0	0	0 0	0	9 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (> (o (۰ د	0 (> •	- (> c	> 0	5 C	5 C	o c	>
	Lead (lb/hr)												_		_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		٠,		٠,			٠,						_
	PM-10 (Lb/Hr)	0	0	0	00		9 0	0	0	0	0	0	0	0	_	_	_	0	U	O	o	U	Ü	0	J				Ü			_		_			<i>.</i>	,		,	- (,		, .	, ,	•
	PM-10 (Ib/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.175.0	0.1255	0.1252	U.14.U
	Coal tons/hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	000	90.0	000	0.00	9 6	3
		0.00	0.00	0.00	0.00	0.00	8 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	200
	mmon Stack U	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	Common Stack Common Stack Unit Operation SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Common States SO2 (Lb/mmBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000
	Common Stack NOx LMHr	0.0	0.0	0.0	0.0	0.0	9 6	0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	o,u
	Common Stack C	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000
	Heat Input (mmBtu)	0.0	0.0	0.0	0.0	0.0	0.0	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- 1	YT02 Gross Co Load MW Value	0	0	0	0	0 1	0 0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0 (0 (o (5 6	5
- 1	YT01 Gross Load MW Value	0	0	0	0	0 '	0 0			. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	0	0	0	0	0	0	0 (0	D (0 0	0 (3
	Date/Hour	04-22-2015 15					04-22-2015 20				04-23-2015 01	04-23-2015 02	04-23-2015 03	04-23-2015 04	04-23-2015 05	04-23-2015 06	04-23-2015 07	04-23-2015 08	04-23-2015 09	04-23-2015 10	04-23-2015 11	04-23-2015 12	04-23-2015 13	04-23-2015 14	04-23-2015 15	04-23-2015 16	04-23-2015 17	04-23-2015 18	04-23-2015 19	04-23-2015 20	04-23-2015 21		04-23-2015 23	04-24-2015 00					04-24-2015 05								04-24-2015 13
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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| ommon Stack C
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| | THU Gross THU Laross Hommon Stack Common Sta | Coal total Coa | Coal total State Common State Coal total Common State Coal total Coal C | Total Continuous State Common St | Part Cool total Part Common Stack Common | Date-Hours Value V | Date-Hours Volume Volume | Date-Hours Value Load Mark Load Load Mark Load Load Mark Load Mark | Part Cool task Lose day L | Part Part | Part Part | Part Part | Part Part | Purple P | Vision control common State Vision control common State Comm | | Continue of the continue of | Purple P | Public P | Part Part | Public P | Part Part | 1,000,000 1,00 | 1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0 | Part Part | | 1,10,10,10,10,10,10,10,10,10,10,10,10,10 | Part Part | | Part Part | Participation Participatio | Part-2015 Part | Part-2-1911 Part-2-1911 | Particular Par | Part Part | Particular Par | Part Part Part Part Part Part Part Part | | | | Characteria Characteria | Company Comp | Charmonic August |

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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Meraury (lb/TBtu)		0.0000	0.000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	
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FM-10 (15/mmBш)		0.1255	0.1255	0.1255	0.1255	0.1233	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	!
Coal tons/hr	: •	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	3 8	000	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 8	,
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n Stack Unit C	<u>.</u>	0.0	0:0	0.0	0.0	9 6	000	0:0	0.0	0.0	0.0	0.0	0:0	0.0	000	9 6	3 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0		3 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	i
Common Stack Common Stack Common Stack Unit Operation SO2 (LbMr) CO2 (Tons/Hr) (minutes)	-	0.0	0.0	0.0	0.0	0.0	9 0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	00	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	000	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	;
Suack Comm		0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000	0.0000	0.0000	0.0000	0.000	00000	0.000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2
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Common Stack		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	9 6	9 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ö	0.0	j
Common Stack Com		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	,
Common Stack Heat Input		0.0	0:0	0.0	0.0	0.0	9 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		9 6	3 6	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	;
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ss YT02 Gross V Load MW	nje v	0	. 0	0	0	0 (.	· -	. 0	0	0	0	0	0	0		0 (-			0	0	0	0	0	0	0	0		0	0 0	.		0	0	0	0	0	0	0	0	0	0	0 0	>
YT01 Gross Load MW	Value	•	. 4	ľ	9	,	20 г	n c) -	. 2	m	0	₩.	2	m	4	ō.	3 2	_ α	o or	. 0	: #	77	13	14	15	16	17	18	13	5 20	17 %	1 2	18	10	05	93	04	02	90	07	80	60	9 5	1
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)		0	U	0 (, .	, 0	J		•		•			,		•	,																_													
HCI (Ib/lbr)		0	0	0 (-		0	0	0	0	0	0	0 (0 (0	-	-	-	Э ·	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	0	0	o (0	0
Mercury (lb/hr)		0	0	0 (-	, ,	0	0	0	0	0	0	0	0 (0	o (.	Э (0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	0	0
Mercury (lb/T8tu)	-	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0,000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Lead (lb/hr)	-	0	0	0	D C		0	0	0	0	0	0	0	0	0	0	-	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (Lb/Hr)	- -	0	0	0	o c	· c	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (15/mm8tu)	.	0.1255	0.1255	0.1255	0.1255	0.1250	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0,1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	· -	0.00	0.00	0.00	0.00	8 6	00.0	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.0	3 6	000	000	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SO2 (LbHt) Common Stack Common Stack Unit Operation SO2 (SO2 (Tons/Hr) (minutes)	- - - - - -	0.0	0.0	0.0	0.0	3 6	0.0	9	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
on Stack Comm	<u> </u>	0.0	0.0	0.0	0.0	3 6	3 5	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0
Commc SO2	1																																											_	_	_	
Common Stack SO2	(Lb/mmBtu)	0.0000	0.0000	0.0000	0.0000	0000	00000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ion Stack		0.0	0.0	0.0	0.0	9 6	9 6	200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack Comm Hear Input NOx LaymmBu NOy		0.0000	0.0000	0.0000	0.0000	0.000	0.000	0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
non Stack Con at Input	inger	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Comm	.E	_		0	0 (- ·	o 6		. 0		0	0	0		0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YT02 Gross	Value	J	J	_			_								-																																
YT01 Gross Load MW		0	0	0	0 (- •	5 6	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Date/Hour		04-28-2015 12		04-28-2015 14			04-28-2015 17						04-29-2015 00	04-29-2015 01	04-29-2015 02	04-29-2015 03	04-29-2015 04	04-29-2015 05	04-29-2015 06	04-29-2015 07	04-29-2015 08	04-29-2015 09	04-29-2015 10	04-29-2015 11	04-29-2015 12	04-29-2015 13	04-29-2015 14	04-29-2015 15	04-29-2015 16	04-29-2015 17	04-29-2015 18	04-29-2015 19	04-29-2015 20	04-29-2015 21	04-29-2015 22	04-29-2015 23	04-30-2015 00	04-30-2015 01	04-30-2015 02	04-30-2015 03	04-30-2015 04	04-30-2015 05	04-30-2015 06	04-30-2015 07	04-30-2015 08	04-30-2015 09	04-30-2015 10

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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HF (lb/hr)		_	_			, ,		J	Ŭ	_		_ `					_	_	_																				_						
HCI (Ib/hr)		0	0	0			0	0	0	0	0	00	O C		0	0	0	0	0	0	0	0	0	0	0 (0 (.	0 (9 6	o c			0	0	0	0	_	0 (96	<i>-</i>		, ,	.	2
Mercury (Ib/hr)		0	0	0 (-		0	0	0	0	0	0 (0 0	0 0	0	0	0	0	0	0	0	0	0	0	0 (0 (0	0)	9 0			0	0	0	0	0	0 1	ο ·	0 0	5 (5 (5 6	-	5
Mercury (b/TBtu)	:	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	00000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000
Lead (lb/hr)	; : :	0	0	0 (5 C	o c	0	0	0	0	0	0 (9 0	o c		0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (9 0	o c		0	0	0	0	0	0	0	۰ ۰		0 (5 6	- (>
PM-10 (Lb/Hr)	:	0	0	0 (o c	• =	0	0	0	0	0	о (5 C	o c	· c	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (9 0	o c	0 0	0	0	0	0	0	0	0	0 1	0 (۰ ۰	-	- (-
PM-10 (b/mmBtu)	-	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0,1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
oal tons/hr	<u>-</u>	0.00	0.00	0.00	0.0	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	0.00	00:0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
it Operation (minutes)	<u>:</u> :	0.00	0.00	0.00	000	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00			000	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	9 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mmon Stack Ur	: - : :	0.0	0:0	0.0	0 0	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0 6	0 6	5 6	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3 8	8	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0
OZ (Lb/Hr) CC	. ::	0.0	0.0	0.0	0.0	3 6	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	9 6	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	8 0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0:0
Common Stack Common Stack Common Stack Unit Operation Coal tonsfirm SCO2 SO2 (LbHr) CO2 (Tons/Hr) (minutes)	in a mulium and in	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	00000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	00000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
		0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	3 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack NOx LoumBtu NOx LouHr		0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0000	0.000	0.000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Common Stack Co	(mushin)	0.0	0.0	0.0	0.0	0.0	0.0	9	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 >	. Value I	0	0	0	0 (o 6	o c		0	0	0	0	0	0 (.		o c		0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	o c	o C		0	0	0	0	0	0	0	0	0	0
YT01 Gross Y	Value	0	0	0	0 1	- (- -	oc	0	0	0	0	0	0 (o (0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	- c	o c	o c	0	0	0	0	0	0	0	0	0	0
Date/Hour		04-30-2015 11	04-30-2015 12	04-30-2015 13			04-30-2015 16		04-30-2015 19	04-30-2015 20	04-30-2015 21	04-30-2015 22	04-30-2015 23		05-01-2015 01		05-01-2015 03	05-01-2015 05	05-01-2015 06	05-01-2015 07	05-01-2015 08	05-01-2015 09	05-01-2015 10	05-01-2015 11	05-01-2015 12	05-01-2015 13	05-01-2015 14	05-01-2015 15	05-01-2015 16	05-01-2015 17	05-01-2015 18		05-01-2015 20					05-02-2015 02	05-02-2015 03	05-02-2015 04	05-02-2015 05	05-02-2015 06	05-02-2015 07		05-02-2015 09

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

F	c	ه د	- (- c	0	0	0	0	0	0	0	0	0 (o (0	0	0	0	0	0	0	0	0	0	0	0 '	0	0	0	0	0	0	0 1	0	3932	5064	0	0 1	0	0 '	o ·	0 1	0	0	0	0	0
HF (IbAn)																								_	_		_	_	_	_	_	_				0.016064	_	0	0	0	_	۰,	0	0	0	_	_
HCI (Ib/hr)	C	- (5 6	0 0		0	0	0	0	0	0	0	0 (0 (0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0			0	0.1285										_	_
Mercury (lb/hr)	•	- ·	Э (0 0	0 0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0	0	0	0				8.89E-06				0		0			_	0	0
Mercury (Ib/TBtu)		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.000			0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.000
Lead (lb/hr)	•	0	0	0 0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.3E-05	4.5E-05	0	0	0	0	0	0	0	0	0	0	0
PM-10 (Lb/Hr)	1	0	0	0 0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.397584	0.337344	0	0	0	0	0	0	0	0	0	0	0
PM-10 (b/mmBtu)		0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr		0.00	0.00	0.00	800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.13	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0000	8 6	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Stack Common Stack Unit Operation SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)		0.0	0.0	0.0	9 6	9 0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
non Stack Com		0.0	0.0	0.0	0.0	3 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Comr SO2 C.b/mmBtu)		0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.000
_		0.0	0:0	0.0	0.0	9 6	0.0	90	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common Stack Common Stack Common Stack Heat Input NOx Lb/mmBtu NOX Lb/mmBtu	<u>:</u>	0.0000	0.000.0	0.0000	0,000	0000	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.0000	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.000.0	0.000.0	0.0000	0.0089	0.000.0	0.000	0.000.0	0.0000	0.0000	0.000.0	0,000.0	0.000.0	0.000.0	0.000	0.0000
Commo NOx Lb/	•																			0.0		0.0			0.0			0.0	0.0	0.0			0.0											0.0			0.0
Common Stac Heat Input (mmBtu)		0.0	0.0	0.0	0.0											0.0	0.0	0.0	0.0	Ö	0.0																										
YT02 Gross Losd MW		0	0	0	0 0	5 6	o c		. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
YT01 Gross Load MW Value		0	0	0	0 0	-	o	· c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	a	0
Dete/Hour		05-02-2015 10	05-02-2015 11				05-02-2015 15		05-02-2015 18	05-02-2015 19	05-02-2015 20	05-02-2015 21	05-02-2015 22	05-02-2015 23	05-03-2015 00	05-03-2015 01	05-03-2015 02	05-03-2015 03	05-03-2015 04	05-03-2015 05	05-03-2015 06	05-03-2015 07	05-03-2015 08		05-03-2015 10		05-03-2015 12	05-03-2015 13	05-03-2015 14	05-03-2015 15	05-03-2015 16	05-03-2015 17	05-03-2015 18	05-03-2015 19	05-03-2015 20	05-03-2015 21	05-03-2015 22	05-03-2015 23	05-04-2015 00	05-04-2015 01	05-04-2015 02	05-04-2015 03	05-04-2015 04	05-04-2015 05	05-04-2015 06	05-04-2015 07	05-04-2015 08

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack
Hourly Mass Emissions
January 1, 2015 through November 26, 2017

																										_	_			_	_	_										
HF (lb/hr)	0.045657	0.191886	0.240239	0.243227	0.241434	0.028327	0	0	0	0 (5 6		0	0	0		- 6	.		•		0	0	0	0	0	0 0	96	.	0	0	0	0 '		-	,				, ,	, 0	
HCI (lb/ln)	0.365259	4.565/3/ 1.535092	1.921912	1.945817	1.931474	1.951474 0.226614	0	0	0	0 (0 0	0	0	0	0	0 (0 0	.	o c	0 0	0	0	O	0	0	0	0 1	0 0	o c	0	0	0	0 (o '	0 (9 0				•	0	
Mercury (lb/hr)	2.53E-05	0.0000316	0.000133	0.000135	0.000134	1.57F-05	0	0	0	0 (0 0	0	0	0	0	0 (o c		o c	• •	0	0	0	0	0	0	0	0 (o c	0	0	0	0	0	0 0	0 0	0 0	o c	.	o c	0	
		3.3068		-		33058	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0000	0.0000	
Lead (lb/hr) (lb/TBtu)	0.000128	0.0001598	0.000673	0.000681	0.000676	7.935-05	0	0	0	0	0 0	00	0	0	0	0	0 0	-	9 6	o c	0	0	0	0	0	0	0	0 (- -	0	0	0	0	0	0 (0 0	9 0	5 6	5 C	9 6	0	
PM-10 L		11.98525 (4.02968 (-	5.0702	0	0	0	0	0 0	0	0	0	0	0	0 0	.	o c	o c		0	0	0	0	0	0	0 (5 C	0	0	0	0	0	0 (0 (o 6	-	> 0	o c		
PM-10 (lb/mm8tu)		0.1255 1	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1733	0.1255	0.1255	0.1255	
Coal tons/hr (It	0:30	3.80	1.60	1.62	1.61	1.61	0.0	0.00	0.00	0.00	0.00	800	0.00	0.00	0.00	0.00	0.00	900		9 6	000	0.0	0.00	0.00	0.00	0.00	0.00	0.00	9 6	900	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	8 6	0.00	
	80.0	0.77	1.00	1.00	1.00	1,00	0:00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	3 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	800	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00:0	0.0	0.00	
Common Stack Common Stack Common Stack Unit Operation So2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	8		-	Ŋ	4	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	3 6	9 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0 6	0 6	0.0	
ack Common	0.0	0.0	0.0	0.0	0.0	770	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 0	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	
SO2 (Lbf	0	0	0	0	0			0	0	0	0 9		0	0	0	0	0 9	2 9	2 9	2 9	2 9	2 2		8	8	8	8	8 :	2 2	8 8	. 8	8	0	8	8	8 :	e :	8 9	8 9	2 2	3 8	
_	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				0.0000									0.0000												0.0000	
Common Stack NOx Lb/Hr	7.5	90.8	39.9	404	40.1	107	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.00	
Common Stack Comm	0.9927	0.9927	0.9925	0.9926	0.9926	0.9926	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	
Common Stack Co Heat Input NC (mm8tu)							0.0	0.0	0.0	0.0	0.0	0 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	3 5	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0:0	
YT02 Gross Com Load MW He					*:		. 0	0	0	0	0 (- c	0	0	0	0	0	0 (D (0 0	o c	, ,	0	0	0	0	0	0	0 (o c	. 0	0	0	0	0	0	0	0	0 (o (00	
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YT01 Gross Load MW Value	60	8 5	1 2	13	14	5 5	1 TP	18	19	20	21	22 E	8	10	02	03	04	50 5	90 i	20	20 20	S E	1 1	12	13	14	15	16	17	2 T	1 2	21	22	23	8	10	05	93	3 !	5 5	3 S	
Date/Hour	_	05-04-2015 1		٠.		05-04-2015 1						05-04-2015 2 05-04-2015 2	_		05-05-2015	05-05-2015 0					05-05-2015 0			05-05-2015 1		05-05-2015 1				. 5102-50-50			05-05-2015	05-05-2015							05-06-2015 (05-06-2015 (
Part		TRUE		TRUE		THUE		oo	Ö	O	0	00		o	0	0	0	0	0 (0 (. ·	, c	. 0	0	0	J	O	J	ا ن	. c	. 0	J	J	J	J	J	٠	_	ا	<u> </u>		

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

1	<u> </u>	0	0	0 0		0	0	0	0	0	0	0 0	-	۰ د	· c	0	0	0	0	0	0	0	0	0	0	0	> 0	-		- c	0	0	0	0	0	0	0 '	0 0	-	0 0	· c	0		, 0	
	HF (tb/hr)									_						_	_	_	_	_		_	_	0	0 .	0 (- 0	5 6	.		. 0		0	_	0	_	0	0 (- ·						
	HCI (Ib/hr)	0	0	0 0	. 0	0	0	0	0	0	0 1	-	-	3 C	, ,		0	0	0											_															
	Mercuny (lb/hr)	0	0	0 (0	0	0	0	0	0	0	0 (5 6	0 0			0	0	0	0	0	0	0	0	0	0 (o (0 (> 0			0	0	0	0	0	0	0 0	> (, ,	, с	, 0	
	Mercury (lb/T8tu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000		0.0000	
L	<u> </u>	0	0	0 '	5 0	0	0	0	0	0	0	0 (-	> 0	0 0	· -	0	0	0	0	0	0	0	0	0	0	0 (0 (0 0	> C	0	0	0	0	0	0	0	0 (0 (9 6	> c	-		, 0	
	Lead (lb/hr)	0	0		. c	. 0		0	0	0	0		ь (.		, _	. 0	0	0	0	0	0	0	0	0	0		0 (5 (5 C	, 0	. 0	0	0	0	0	0	0 (0	0 0	5 6	5 c		. 0	
;	PM-10 (Lb/Hr)	_																																											
	PM-10 (Ib/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1253	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.175	0.1255	
	Coal tons/hr	0.00	0.00	0.00	9 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 6	8 6	000	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00	00.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 6	0.00	
		0.00	0.00	0.00	0 0	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	3 6	0.00	00.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	000	0.00	
ŀ	mon Stack Uni (Tons/Hr)	0.0	0.0	0.0	0.0	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 6	2 6	8 6	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	8 6	8 8	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	
	SOZ (Lb/Hr) CO2 (Tons/Hr) (minutes)	0:0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	2 6	8 6	9 0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	2 6	9 0	0.0	0.0	0.0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	,
7	S S	8	8	8	2 2	2 5		8	2	8	8	8	8	2 :	3 2	2 2	3 5	3 2	8 8	8	8	8	8	8	8	8	8	8	8	8 8	3 8	3 8	8 8	8	8	8	8	8	8	8 :	8 9	8 8	3 8	2 E	;
Common Cto	SO2 (Lb/mmBtu)	0.0000	0.000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							0.0000				0.000									0.0000	
	MOx Lb/Hr	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	9 6	99	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
-	Common Stack Common Stack NOx Lb/mmBtu NOx Lb/Hr	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0.0000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0000	0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	,
	Ę Ś	0.0	0.0	0.0	0.0		0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0)))	9 6	9 6	2 0	9	8 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	;
1	Heat Input	_																						_	_	_	_	_	_	.	- ·			_	_	0	_	_		_	_	0 1		0.5	
	Y I UZ Gross Load MW Value	0	0	0	00	5 C	0	0	0		0	0	0	0	0	0		, c	, с		. 0			0	0	J	J	J	J	ا ب	<u> </u>	ى ر د	, (J		J	0	_	_	_		_	0 0	
0.50	YTUT Gross Load MW Value	c	0	0	0 (5 C	0		0	0	0	0	0	0	0	0 0	.	-	o C	, c	0	0	0	Б	0	0	0	0	0	0	0 0	>			0	0	0	0	0	0	0	0 (0	0 0	,
	Date/Hour L	05-06-2015 08	05-06-2015 09	05-06-2015 10		05-06-2015 12					05-06-2015 18	05-06-2015 19	05-06-2015 20				05-0/-2015 00			05-07-2015 04	05-07-2015 05	05-07-2015 06		05-07-2015 08		05-07-2015 10	05-07-2015 11	05-07-2015 12	05-07-2015 13	05-07-2015 14	05-07-2015 15	05-07-2015 16	05-07-2015 18	05-07-2015 19	05-07-2015 20	05-07-2015 21	05-07-2015 22	05-07-2015 23	05-08-2015 00	05-08-2015 01	05-08-2015 02			05-08-2015 05	

Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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ľ	HF (lathr)																			_	_				5 6	.			. 0	_	_	•	.	- ·						0		0	0 (5
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	Mercury (lb/hr)	0	0	0	0	0 (0 (0 (Э (5 6	>	5 6	0	,	o c	· c	۰ ۵	0	0	0	0	0	0 (0 0	၁	5 6	o c	0 0	0	0	0	0	0 (-	0 0	· c	. 0	0	0	0	0	0	0 (-	5
	Mercury N (lb/TBtu)	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000	2000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0,000	0.0000
-		0	0	0	0	0	0	0 (0	0 (- (.	.		5 6	, ,	, ,	. 0	0	0	0	0	0	0	0 (0 (, ,	0	0	0	0	0	0 (o c				0	0	0	0	0 (э.	0
	Lead (lb/hr)								_			.	2 (•	0	0	0	0	0 (- c			. 0	0	0	0	0 (5 0	> 0			. 0	0	0	0	0 (0	0
	PM-10 (Lb/Hr)	O	0	0	0	0	0	0		0 (Ū																										
	PM-10 (lb/mmBlu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.125	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.123	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
		0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 6	8 8	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 8	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	Juit Operatio (mirutes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	9 6	Š	6	ö	0.0	0.0	ö	ö	0.0	ö	öö	5 6	3 6	ö	ā	ö	ö	ö	o o	j (3 6	<i>i</i> c	i d	Ö					
	mmon Stack 1	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	0 0	9 0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 5	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 6		0:0	0.0	0.0	0.0	0.0	0.0
	Common Stack Common Stack Unit Operation Coal tonshr. SO2 (Lb/Hr) CO2 (Tons/Hr) (minutes)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	0.0	9 6	200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 0	9 0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	9 6	8 6	0.0	0.0	0.0	0.0	0.0	0.0
	8 8 8	0		. 0	0	0	0	o	0	0	9	0	٥ .	8	9 9	⊇ 9	2 9	2 5	2 5	2 2	. 8	8	8	8	8	8	8 9	8 8	3 5	3 8	8 8	8	8	8	8 :	8 :	8 8	3 8	3 8	3 8	8	8	8	8	8
	Sommon Stac SO2 (Lb/mmBtu)	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0000											0.0000	0.0000							0.0000								0.0000
	nmon Stack IOx Lb/Hr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	o.	0.0	3 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	000	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0
	Common Stack Common Stack NOx Lb/mmBtu NOx Lb/Hr	0.000	0.000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0,000	0000	0.000	0.000	0.000	0.0000	0.000.0	0.0000	0.000	0.0000	0.0000	0.0000	0.000	00000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	00000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000
	NOX.						_		_	_	_	_	_	_	_	_	_						_		_		0	0	o (. 0	0	0	0	0	0 (.	9 6	9 0	0.0	0.0	0.0	0.0	0.0
	Common Stack (Heat Input (mmStu)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	3 6	00	0.0	0.0	0.0						0.0																
	sso.	-	o C	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (5 6	0 0) C	· C	0	0	0	0	0	0	0	0 0	o c	o c	. 0	0	0	0	0	0 (5 (O	o c		0	0	0	0
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	ļ	c) c	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5 (o 0) c	o c	0	0	0	0	0	0	0	0 (0 0	o c	0	0	0	0	0	0	0 (5	-	· c	0	0	0	0
	YT01 Gross Load MW Value		_ ~	. ~	. ~		۲.	~		ıo	(0	7	en.	o	c	7	7	m r	.	4 r	1 ~	n et	· IV	. 9	7	60	ō.	0	eļ 1	ان د	ų <	ιν	υρ	7.	ες:	ឡ	<u>ي</u>	27	27	8 8	3 5	5 2	93	40	05
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

The column The						_				_		_	_	_				_	_	_	_	_				. <i>-</i>	. –	_	_	_		~ <i>~</i>		_	_	_	<u> </u>	<u> </u>						0
Company Comp		HF (lb/hr)	0	0	0 '	э с	, 0	0	0	0	0	0	0	90	, c			0	0	0	0	0	، ت	، د	ه د) C	, 0	J	J	. ن	، ب	c ر	, 0											,
Character Content Co		HCI (Ib/hr)	0	0	0 (0 0		0	0	0	0	0	0	5 6	o c		0	0	0	0	0	0	0 (0 (9 0	5 C	0	0	0	0	0 (.		0	0	0	0	0 (o 6	o c	0 0	. 0		. 0
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Continue		Mercury (lb/TBtu)	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.000	0.0000
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Third Thir		Lead (_	_	_		_	_	_	_	_			_	_	_	_		_ ,					
This paper Thi		PM-10 (Lb/Hr)	0	0	0	00		. 0	0	0	0	0	0	0 6	-	o c	, ,	. 0	0	0	0	0	0	0	0 (56	. 0	0	0	0	0				U	U	J					, .	, .	
This column	•	PM-10 (lb/mmBtu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1233	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0 1755	0.1255
Company Comp			0.00	0.00	0.00	0 0	8.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	8 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.0	000	0.00	0.00	0.00	0.00	0.00	0.00	9 6	9 6	866	800	0.00
Participate Common State Commo			0.00	0.00	0.00	0.00	900	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0 0	8 6	9 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8 6	8 6	0.00
Common Stands Common Stand		nmon Stack Un	0.0	0.0	0.0	0.0	9 6	8 8	0.0	0.0	0.0	0.0	0.0	0.0	o 6	9 6	9 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	90
Participate Common State Commo		ттоп Stack Con)2 (Lb/Hr) CO2	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 5	3 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 0	00	0.0	0.0	0.0	0.0	9 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	0.0
Participate Common State Commo		SO2 SO2 SVMmBtu)	0.0000	0.0000	0.0000	0.0000	0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0000	0.0000	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	00000	0000	0.0000
Origination Continuous Continuo un			0.0	0.0	0.0	0.0	2 6	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0)))	9 6	0.0	99	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0:0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	3 6	8 8
Origination Continuous Continuo un		nmon Stack Cor x Lb/mmBtu N	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	00000	0.0000
Origination Continuous Continuo un		non Stack at Input mBtul	0.0	0.0	0.0	0.0	0 0	2 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3 6	0.0	0.0	0.0	0.0	0.0	9 6	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	2 6	2 6	0.0
Particular of Value -10-2015 06 -10-2015 07 -10-2015 07 -10-2015 10 -10-2015 10 -10-2015 11 -10-2015 11 -10-2015 12 -10-2015 13 -10-2015 13 -10-2015 13 -10-2015 14 -10-2015 15 -10-2015		Com He: fa:	0	_	_		- c				0	0		0	0 (.					0	0	0	0	0	0 (. 0		0	0	0 (5 0	. 0	. 0	0	0	0	0	0	0 (5 6	.	
Particular of Value -10-2015 06 -10-2015 07 -10-2015 07 -10-2015 10 -10-2015 10 -10-2015 11 -10-2015 11 -10-2015 12 -10-2015 13 -10-2015 13 -10-2015 13 -10-2015 14 -10-2015 15 -10-2015		YT02 Gross Load MW Value	J	J	J	- (- •				J	_	_		- '	- `			_	_	_																							
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Dominion Energy - Yorktown Power Station - Units 1 and 2 Combined Stack Hourly Mass Emissions January 1, 2015 through November 26, 2017

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НЁ (Блл)	Ü	Ü	Ü		, 0	U	Ü	Ü						, .	Ü	Ü	Ŭ	_	Ŭ	_	J	J	_	_	,							Ŭ	_	Ü	Ū	_	_	_	_	_	_	_	_	_
HCt (lb/hr)	0	0	0	0 0	. 0	0	0	0	0	0	0	00	0 0	0	0	0	0	0	0	0	0	0	0	0	.	0 (0 (2 (O C	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury (lb/hr)	0	0	0	0 0	0	0	0	0	0	0	0	00	o c	0	0	0	0	0	0	0	0	0	0	0	5 (0 (0 0	2 (o c	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury (lb/TBtu)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Lead (lb/hr)	0	0	0	0 0	. 0	0	0	0	0	0	0	00	0 0	0	0	0	0	0	0	0	0	0	0	0	5 (0	0 0	o (-	0		0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (Lb/Hr)	O	0	0	0 0	0	0	0	0	0	0	0	0 0	o c	0	0	0	0	0	0	0	0	0	0	0	5 (0	0 0	o (> 0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0
PM-10 (lb/mmBw)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	U.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255
Coal tons/hr	0.00	0.00	0.00	0 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.0	00.0	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1	0.00	0.00	0.00	0.0	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9 6	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	000	8 6	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Common Stack Common Stack Common Stack Unit Operation SO2 (Lb/H) CO2 (TonsHr) (minutes)	0.0	0.0	0.0	0 6	8 8	0.0	0.0	0.0	0.0	0.0	0:0	0.0	2 6	2 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0
mmon Stack Co	0.0	0.0	0.0	0.0	9 9	0.0	0.0	0:0	0.0	0.0	0.0	0.0	9 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	000	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SO2 Suck Cc SO2 S Lb/mmBtul)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	00000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
mmon Stack Co	0.0	0.0	0.0	0.0	8 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 6	000	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	2 6	9 6	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0
Common Stack Common Stack Common Stack Heat liptut NOX LibrimmBtul NOX LibrimmBtul	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	00000	0.0000	0.000	0,000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
nmon Stack Collect Input NO	0:0	0.0	0.0	0.0	9 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9 0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	3 6	000	90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YT02 Gross Con Load MW H Vatue	0	0	0	0 0		0	0	0	0	0	0	0 0			0	0	0	0	0	0	0	0	0	0	0	0	0 (0 0	5 6	-			0	0	0	0	0	0	0	0	0	0	0	0
YT01 Gross Y1	0	0	0	0 0	• 0		0	0	0	0	0	0 (5 6		0	0	0	0	0	0	0	0	0	0	0	0	o (0 (5 (o c	0		0	0	0	0	0	0	0	0	0	0	0	0
Date/Hour	05-12-2015 05			05-12-2015 08			05-12-2015 12	05-12-2015 13				05-12-2015 17				05-12-2015 22	05-12-2015 23		05-13-2015 01										05-13-2015 11	05-13-2015 12		05-13-2015 15	05-13-2015 16	05-13-2015 17	05-13-2015 18	05-13-2015 19			05-13-2015 22					05-14-2015 03

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1	,		0	_	e	c	c	c	0	c	0	0		0	0		0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				- 0	,
НЕ (флу)				J	Ū	Ū	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_									_		_		
HCI (Ib/hr)	c	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (0 (00	
Mercury (Ib/hr)	c		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0 .	00	J
Mercury (Ib/TBtu)	0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Lead (lb/hr)	c	> 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0 (0 0	,
PM-10 (LMH1)	c	> 0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0 (0 0	,
PM-10 (ib/mm8tu)	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	0.1255	
Coal tons/hr (I	0	3 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	1
1	0	00.0	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00.0	00'0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0:00	0.00	0.00	0.00	0.00	0.00	:
mon Stack Unit	ć	9 6	9 00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0:0	:
Common Stack Common Stack Common Stack Unit Operation SO2 SO2 (LbHr) CO2 (Tons/Hr) (minutes)	c	9 6	0.0	0.0	0.0	0.0	0:0	0:0	0:0	0.0	0.0	0:0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0:0	0:0	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0:0	0:0	0.0	0.0	;
Common Stack Com SO2 (Lb/mmBtu)	0000		0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.0000	0.0000	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.000.0	0.0000	0.0000	0.000.0	0.0000	0.0000	0.000.0	0.0000	0.0000	0.000.0	0.000.0	0.000.0	0.000.0	0.000	0.000.0	0.000.0	0,000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Common Stack NOx Lb/Hr	c	2 6	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	}
ommon Stack (Ox Lb/mm8tu	0000	0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	0.000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Common Stack Common Stack Heat Input (mmBtu) NOX Lb/mrBtu	ć	9 6	0:0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0:0	0.0	0.0	0.0	0.0	0.0	;
\$88	c	> 0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (0	00	,
YT02 Gn Load M Value				-			_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_		
YT01 Gross Load MW Value	c	3 6	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (. ·	.		
Date/Hour	A0 310C A1 30		05-14-2015 06	05-14-2015 07	05-14-2015 08	05-14-2015 09	05-14-2015 10	05-14-2015 11	05-14-2015 12	05-14-2015 13	05-14-2015 14	05-14-2015 15	05-14-2015 16	05-14-2015 17	05-14-2015 18	05-14-2015 19	05-14-2015 20	05-14-2015 21	05-14-2015 22	05-14-2015 23	05-15-2015 00	05-15-2015 01	05-15-2015 02	05-15-2015 03	05-15-2015 04	05-15-2015 05		05-15-2015 07	05-15-2015 08		05-15-2015 10	05-15-2015 11	05-15-2015 12	05-15-2015 13	05-15-2015 14	05-15-2015 15		05-15-2015 17								05-16-2015 01	
6 0	ä	3 5	8	50	50	9	9	8	8	9	8	<u></u>	임	임	9	8	임	9	20	80	20	8	8	8	8	8	8	8	9	9	10	8	9	9	8	8	9	9	9	9	5	6	ö :	ö	ö :	පු වූ	